

GAITC

2020全球人工智能技术大会

THE GLOBAL ARTIFICIAL INTELLIGENCE TECHNOLOGY CONFERENCE (2020)

Jul 25-26th 2020 China • Hangzhou

Agenda

Supervisors: China Association for Science and Technology
Chinese Academy of Sciences
Chinese Academy of Engineering

Organizers: CAAI, Yuhang District Government of Hangzhou

Co-organizer: Hangzhou Future Sci-Tech City Management Committee

Undertakers: OSChina, Must

About GAITC 2020

Located in the golden south of the Yangtze River Delta, Hangzhou remains as an attraction with its modern prosperity and ancient beauty. As an innovative and intelligent city, it stands out from the numerous cities in China with the great achievements in artificial intelligence. The 2020 Global Artificial Intelligence Technology Conference (GAITC 2020) will be held by Chinese Association for Artificial Intelligence (CAAI) in the Future Sci-Tech City of Hangzhou, from July 25th to 26th.

Started in 2016, the GAITC has been successfully organized for 4 years in a row, and now established itself as one of the largest and most influential professional conferences in the Chinese AI industry. By acting locally and thinking globally, the annual conference takes an international perspective, cutting-edge and proactive concepts to outline the blueprint and path of AI development.

As the new engine driving the scientific and technological revolution, AI fundamentally boosts the Chinese economic restructuring towards the innovation-based economy. After a couple of years of development, AI has been integrated into the basic national strategies of different countries as a hot subject for the industry, universities and education institutions. In the picturesque July, we are waiting you here in Hangzhou, the beautiful city in the south China, to talk about the new pattern and prospect of AI together.

Communication, Integration and Mutual Benefits

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GAITC 2020 Guide

Welcome to attend GAITC 2020!

For your convenience in the conference, please read the following conference guide.

Offline Conference

| Date & Venue

Time: July 25th-26th, 2020

Place: Academic Exchange Center, Hangzhou Future Sci-Tech City

| Registration

Time: 10:00-22:00, July 24th

Place: Landison Xixi Hotel Hangzhou

Address: Southeast Corner at the Intersection of Sikai Road and Yongxing Road,
Yuhang District, Hangzhou, Zhejiang

Time: 08:00-22:00, July 25th-26th

Place: Registration Area of Academic Exchange Center, Hangzhou Future Sci-Tech City

*Please wear your conference card after registration which is the only valid certificate.
And please take good care of it.*

| Conference Time

Time: July 25th-26th, 2020

| live streaming address



Organization

HONORARY CHAIRMEN



Deyi LI
Honorary President of CAAI
Academician of Chinese Academy of Engineering
CAAI Fellow



Yunhe PAN
Academician of Chinese Academy of Engineering
Professor of Zhejiang University
CAAI Fellow



Peigen LI
Academician of Chinese Academy of Engineering
President of Chinese Mechanical Engineering Society

GENERAL CO-CHAIRS



Qionghai DAI
President of CAAI
Academician of Chinese Academy of Engineering
Dean and Professor of School of Information and Technology
Tsinghua University
CAAI Fellow



Yaqin ZHANG
Dean of Institute for
AI Industry Research and Chair Professor of
AI Science, Tsinghua University
Foreign member of American Academy of
Arts and Sciences

PROGRAM COMMITTEE CO-CHAIRS



Shaoping MA
Vice Chairman of CAAI Board of Supervisors
Deputy Acting Dean and Professor of
Tiangong Research Institute for
Intelligent Computing, Tsinghua University
CAAI Fellow



Yueting ZHUANG
Director of Intelligent Creativity & Digital Art
Committee of CAAI
Professor of Zhejiang University
CAAI Fellow



Haifeng WANG
Chief Technology Officer of Baidu
ACL/CAAI Fellow

ORGANIZING COMMITTEE CO-CHAIRS



Weining WANG
Secretary-General of CAAI
Research Fellow of
Beijing University of
Posts and Telecommunications



Jiansheng MEI
Secretary of Party Working
Committee of Zhejiang
Hangzhou Future
Sci-Tech City



Yueming WANG
Secretary General of Brain-Machine
Integration and Bio-Machine Intelligence
Committee, CAAI
Professor of Zhejiang University



Feng XU
Deputy Secretary-General of CAAI
Associate Professor of School of
Software, Tsinghua University
Winner of the National Science Fund
for Outstanding Young Scholars



Zhigang CHEN
Deputy Secretary-General of CAAI
Vice President of iFLYTEK Scientific
Research Institute

Organization

Forum Chairmen



Peigen LI

Academician of Chinese Academy of Engineering
President of Chinese Mechanical Engineering Society



Bin LI

Director of Intelligent Manufacturing Committee, CAAI
Professor of Huazhong University of Science and Technology



Tianzi JIANG

Research fellow of the Institute of Automation, Chinese Academy of Sciences
Foreign Member of Academia Europaea
IEEE/AIMBE Fellow



Feng WU

Professor of University of Science and Technology of China
IEEE Fellow



X. Sean Wang

Professor of School of Computer Science & Technology
Fudan University
CCF Fellow



Junping DU

Director of Intelligent Service Committee, CAAI
Professor of the School of Computer Science, Beijing University of Posts and Telecommunications (BUPT)
CAAI/CCF Fellow



Zhouchen LIN

Professor of Peking University
Distinguished Young Scholar of the National Science Fund
IEEE/IAPR Fellow



Bowen ZHOU

Chair of JD Technology Committee
President of JD Cloud & AI
IEEE Fellow



Benyu ZHANG

Chief Scientist of Sharing Intelligence Lab of Ant Financial



Jianwei YIN

Vice Dean and Professor of College of Computer Science and Technology
Zhejiang University
Qiushi Distinguished Professor of Zhejiang University
Winner of National Science Fund for Distinguished Young Scholars



Heyan HUANG

Director and Professor of the Artificial Intelligence Institute
Beijing Institute of Technology
CAAI Fellow



Shengmei SHEN

Chief Scientist of Pensees Technology
Managing Director of Pensees Research Institute



Diange YANG

Dean and Professor of School of Vehicle and Mobility Tsinghua University
Leading talent of the National 10000 Talents Program
CSAE Fellow



Dongpu CAO

Canada Research Chair in Driver Cognition and Automated Driving
Director of Cognitive Autonomous Driving Lab and Associate Professor of University of Waterloo



Xiaoping CHEN

Director and Professor of Lab of Robotics, University of Science and Technology of China



Guoyu WANG

Professor of School of Philosophy
Distinguished Professor of MOE "Chang Jiang Scholars" Program
Fudan University



Lihua ZHANG

Executive vice president and Distinguished Professor of Intelligent Robot Research Institute, Fudan University



Jianru XUE

Professor of Xi'an Jiaotong University
Distinguished Professor of MOE Chang Jiang Scholars Program
CAA Fellow



Yu HU

Co-founder and Rotating President of iFlytek
CAAI Fellow



Houqiang LI

Deputy Dean and Professor of School of Information Science and Technology
University of Science and Technology of China
Director of MOE-Microsoft Key Laboratory of Multimedia Computing and Communication

Organization

Forum Chairmen



Yi ZHANG

Director of Intelligent Transportation Committee, CAAI
Professor of Tsinghua University



Chaozhong WU

Secretary General of the Intelligent Transportation Committee, CAAI
Vice President and Professor of Wuhan University of Technology



Qinghua HU

Deputy Director of Granular Computing & Knowledge Discovery Committee, CAAI
Deputy Dean of College of Intelligence and Computing
Dean and Professor of College of Artificial Intelligence, Tianjin University
Distinguished Young Scholar of the National Science Fund



Zhiyong LI

Executive Deputy Dean of School of Robotics
Distinguished Professor of "Yue Lu Scholars" Program
Hunan University



Wanliang WANG

Dean and Professor of College of Zhejiang University of Technology
The national-level famous teacher



Fei WU

Deputy Dean and Qiushi
Distinguished Professor of the College of Computer Science and Technology
Zhejiang University
Winner of the National Natural Science Fund for Distinguished Young Scholars



Wei WANG

Chief Information Officer of SINA
Director of Sina AI Media Research Institute



Yi YANG

Special Honorary Professor at Zhejiang University
Professor at University of Technology Sydney
Visiting Professor
Baidu Research



Hongcai SHANG

Director of the MOE Key Lab of Chinese Internal Medicine (Beijing University of Chinese Medicine)
Laureate of the National Science Fund for Distinguished Young Scholars



Yi ZHANG

Deputy Secretary-general of CAAI
Academic Dean and Professor of College of Computer Science
Sichuan University
IEEE/CAAI Fellow



Guiguang DING

Associate Dean and distinguished Research Fellow of School of Software, Tsinghua University
Winner of The National Science Fund for Distinguished Young Scholars



Yuan FAN

Board Chairman and President of DBAPPSecurity



Ye Ouyang

CTO & Senior Vice President
AsiaInfo Technologies



Hua WU

Chair of Baidu Technical Committee



Yang LIU

Director and Professor of Tsinghua Artificial Intelligence Institute
Winner of the National Science Fund for Distinguished Young Scholars



Yue ZHANG

Distinguished Research Fellow of Westlake University



Jun ZHU

Director and Professor of the Basic Theory Center, Tsinghua AI Institute



Junchi YAN

Research Fellow of Department of Computer Science and Technology
Shanghai Jiao Tong University



Yiqun LIU

Deputy Secretary-General of CAAI
Professor of Tsinghua University
Leading talent of the National Scientific and Technological Innovation Program



Wanxiang CHE

Professor of School of Computer Science and Technology
Harbin Institute of Technology
MOE Young Chang Jiang Scholar

Conference Agenda

July 25th				Place
AM	09:00-09:50	Opening Ceremony	Leaders' speeches	Communication Hall
			Opening Ceremony	
	09:50-10:00	Group Photo		
10:00-11:40	Keynotes			
PM	13:30-17:00	Keynotes		
PM	18:30-22:00	Intelligent Security Forum		Communication Hall
	19:00-22:00	The Second AI Ethics Forum in the Global Context		Meeting Room - 4
	18:30-22:00	Smart Health-care Forum		Meeting Room - 5
	19:00-22:15	AI Youth Forum		Meeting Room - 6
July 26th				Place
AM	09:00-12:30	Brain Science & Artificial Intelligence Forum		Communication Hall
	08:30-12:30	Machine intelligence of Frontier Forum		Meeting Room - 1
	09:00-12:30	Sharing Intelligence Frontier Forum		Meeting Room - 2
	08:30-11:40	New Media and Social Entertainment in the AI Era Forum		Meeting Room - 3
	09:00-12:30	AI Women's Future Forum		Meeting Room - 7
		Forum of Swarm Decision-making and Control for Traffic Systems		Meeting Room - 8
	09:00-12:20	Machine Learning Forum		Meeting Room - 9

Conference Agenda

July 26th			Place
PM	14:00-17:30	Post-pandemic Intelligent Manufacturing & Industrial Internet Application Forum	Communication Hall
	13:30-17:30	Intelligent Interaction in the Interconnected Context Forum	Meeting Room - 1
	13:30-17:00	Big Data & Industry Prospect in the AI Context Forum	Meeting Room - 2
	13:30-17:30	Robotic Environment Perception & Cognition Forum	Meeting Room - 3
	13:30-17:15	Pattern Recognition Frontier Forum	Meeting Room - 10
	13:30-17:30	AI & 5G Forum	Meeting Room - 11
PM	18:30-21:50	Forum on Natural Language Processing	Meeting Room - 12
	18:30-21:30	Intelligent Autonomous Vehicles Forum	Meeting Room - 13
	18:30-22:00	Intelligence Education Forum	Meeting Room - 14

Conference Agenda

Time	Agenda & Place
July 26th 09:00-12:20	CAAI AI Classroom & Cloud Classroom Meeting Room - 15
July 26th 14:00-16:40	“Looking into Future” Hangzhou On-cloud Exhibition for Scientific and Technological Achievements -- AI Session Place: Academic Exchange Center, Hangzhou Future Sci-Tech City international conference center (1188 Liang Mu Road)
July 25-26th	Cloud Showroom https://gaitc.caaicn/

AM July 25th

Opening Ceremony & KEYNOTE

📍 Communication Hall

🕒 09:00–11:40

Time	Topics	Guest Speakers	Workplaces and Positions
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Host: Yaonan WANG Supervisor of CAAI Board of Supervisors; Academician of Chinese Academy of Engineering; Professor of Hunan University

09:00-09:50	Opening Ceremony	Qionghai DAI	President of CAAI; Academician of Chinese Academy of Engineering; Dean and Professor of School of Information and Technology, Tsinghua University CAAI Fellow
		Zhenfeng ZHANG	Member of the Standing Committee of Hangzhou Municipal Party Committee; Secretary of Yuhang District Party Committee
		Xin LIU	Deputy Party Secretary of Hangzhou Municipal Party Committee; Mayor of Hangzhou Municipal Government
		Xingfu GAO	Vice Governor of Zhejiang Provincial Government
		Opening ceremony	
09:50-10:00	Group Photo		
10:00–10:50	Five Issues Relating to Visual Knowledge	Yunhe PAN	Academician of Chinese Academy of Engineering Professor of Zhejiang University; CAAI Fellow
10:50–11:40	A few thoughts about AI	Qionghai DAI	President of CAAI; Academician of Chinese Academy of Engineering; Dean and Professor of School of Information and Technology, Tsinghua University CAAI Fellow

PM July 25th

KEYNOTE

📍 Communication Hall

🕒 13:30–17:00

Time	Topics	Guest Speakers	Workplaces and Positions
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Host: **Yueting ZHUANG** Director of Intelligent Creativity & Digital Art Committee of CAAI; Professor of Zhejiang University; CAAI Fellow

13:30-14:20	City Brain 2.0 - An AI-enabled System with Rational Terminal-Edge-Cloud Division	Wen GAO	Academician of Chinese Academy of Engineering Boya Chair Professor of Peking University Director of Peng Cheng Lab, ACM/IEEE Fellow
14:20-15:10	From Deep Learning to Deep Understanding	Harry Shum	Honorary Vice President of CAAI Academician of National Academy of Engineering; U.S.A Academician of Royal Academy of Engineering; U.K. Adjunct Professor, Tsinghua University; ACM/IEEE/CAAI Fellow
15:10-15:20	Tea Break		
15:20-16:10	Advances in Autonomous Driving	Yaqin ZHANG	Dean of Institute for AI Industry Research and Chair Professor of AI Science, Tsinghua University; Foreign member of American Academy of Arts and Sciences
16:10-17:00	AI-based New Infrastructurue Accelerates Industry Intelligentization	Haifeng WANG	Chief Technology Officer of Baidu; ACL/CAAI Fellow

..... General Co-Chair/Guest Speaker/Keynote Speaker



Qionghai DAI

President of CAAI; Academician of Chinese Academy of Engineering; Dean and Professor of School of Information and Technology, Tsinghua University; CAAI Fellow

Dean of the Beijing National Research Center for Information Science and Technology. He was a recipient of the National Science Fund for Distinguished Young Scholars from the National Natural Science Foundation of China (NSFC) in 2005, appointed as a Distinguished Professor of the "Changjiang Scholar Award Program" by the Ministry of Education (MoE) in 2009, and winner of the 2017 National Innovation Competition Award. Prof Dai's research mainly focus on artificial intelligence (stereovision) and computational photography, and has long been devoted to the theoretical and technological innovation in these fields. He was the principal scientist of several national major grants including The Major State Basic Research Development Program of China (973 program) from Ministry of Science and Technology, Special Fund for Research on National Major Research from the NSFC. He has developed a video rate Real-time Ultra large Scale High resolution microscope (RUSH), which is expected to advance the progress of brain science and tumor metastasis. He won the second prize of The State Scientific and Technological Progress Award in 2016, the first prize of The State Technological Invention Award in 2012 and the second prize of The State Technological Invention Award in 2008.

..... Honorary Chairman/Keynote Speaker



Yunhe PAN

Academician of Chinese Academy of Engineering; Professor of Zhejiang University; CAAI Fellow

Prof. PAN was the former Executive Vice President of CAE, the President of Zhejiang University, the member of the Academic Degrees Committee of the State Council, the member of the National Teaching Material Committee, the Director of the Strategic Consultative Committee of New Generation of Artificial Intelligence of China, and the President of Artificial Intelligence Industry Alliance; He was one of the pioneers in intelligent CAD and computer arts; dedicates to the researches of AI, computer graphics, CAD and industrial design; once undertook multiple important research programs; innovatively proposed the concepts of cross-media intelligence, data sea, intelligent library, AI 2.0, visual knowledge, etc.; published multiple papers; realized a series of significant research achievements; and won multiple national scientific and technological awards.

..... Keynote Speaker



Wen GAO

**Academician of Chinese Academy of Engineering; Boya Chair Professor of Peking University
 Director of Peng Cheng Lab, ACM/IEEE Fellow**

Prof. GAO is the Chairman of Board of Directors, Artificial Intelligence Industry Technology Innovation Strategic Alliance, the deputy Director of National Standardization Technical Committees, and the leader of Audio and Video Coding Standard (AVS) Work Group of China. He was the member of the 10th, 11th and 12th CPPCC National Committee. He served as the member and Chairman of Steering Committee for Intelligent Computing System of 863 Hi-Tech R&D Program from 1992 to 2001; the Director of the Institute of Computing Technology, Chinese Academy of Sciences (CAS) from 1998 to 1999; the Executive Vice President of the Graduate School of Chinese Academy of Sciences from 2000 to 2004; the Vice President of the University of Science and Technology of China from 2000 to 2003; the Vice President of National Natural Science Foundation (NSFC) of China from 2013 to 2018; and the President of China Computer Federation (CCF) since 2016 to 2020. He mainly focuses on artificial intelligence and multimedia technology, computer vision, pattern recognition image processing and virtual reality. He once presided over over 20 national level programs, including the national "973 Program" (as the Chief Scientist), the National Natural Science Foundation Innovation Group Project, the "863 Program" and the National Natural Science Foundation; and won 5 second prizes of National Scientific and Technological Progress Award and 1 second prize of the National Technological Invention Award.

..... Keynote Speaker



Harry Shum

**Honorary Vice President of CAAI Academician of National Academy of Engineering
 U.S.A Academician of Royal Academy of Engineering
 U.K. Adjunct Professor, Tsinghua University
 ACM/IEEE/CAAI Fellow**

Dr. Harry Shum is an adjunct professor at the Institute for Advanced Study, Tsinghua University. He was the Executive Vice President of Microsoft's Artificial Intelligence (AI) and Research group. He was responsible for driving the company's overall AI strategy and forward-looking research and development efforts spanning infrastructure, services, apps and agents. He oversaw AI-focused product groups including Bing. He also led Microsoft Research, one of the world.

..... General Co-Chair/Keynote Speaker



Yaqin ZHANG

**Dean of Institute for AI Industry Research and Chair Professor of AI Science, Tsinghua University
Foreign member of American Academy of Arts and Sciences**

Dr. ZHANG is the Fellow of both Australia National Academy of Engineering and IEEE. He was the former President of Baidu Inc., the Chairman of Microsoft Asia-Pacific R&D, the managing director of Microsoft Research Asia, the Board Chairman of Microsoft China, and the Vice President of Mobile and Embedded of Microsoft China; He once acted as the advisors for 5 governments, the member of Board of Trustees or honorary professor for 12 universities, the member of "Committee of 100", the advisor of National Information & Communication Technology Australia, and honorary professor of the University of Sydney; Currently, he works in the UNDP Board of Directors for enterprises, and the member of the "Future Transportation" Steering Committee of Davos World Economic Forum; He obtained over 60 American patents, and published 560 articles and 11 monographs.

..... Program Committee Co-Chair/Keynote Speaker



Haifeng WANG

Chief Technology Officer of Baidu; ACL/CAAI Fellow

Dr. WANG is the president of the National Engineering Laboratory for Deep Learning Technology and Applications, the first Chinese Chairman of the Association for Computational Linguistics (ACL) and the founding chair of Asia-Pacific Chapter of the ACL; He was awarded with the Second Prize of National Science and Technology Progress Award, National Scientific Innovation and Advancement Award, and the Outstanding Contribution Award of Wu Wen Jun AI Science and Technology Award; and enjoys the special government subsidy of the State Council.

..... Lecturer of AI Classroom/Host



Yaonan WANG

**Supervisor of CAAI Board of Supervisors
Academician of Chinese Academy of Engineering
Professor of Hunan University**

Prof. WANG is an expert in robotics and intelligent control, and the Director of the National Engineering Lab for Visual Perception and Control Technology of Robots, Hunan University. He has won 1 second prize of National Technological Invention Award, 4 second prizes of National Scientific and Technological Progress Award, 11 first prizes of provincial and ministerial awards; obtained over 70 national invention patents, and honorary titles as the "National Outstanding Teachers of Higher Education Institutions," the "National May 1 Labor Medal," "National Advanced Worker," and the Second National Innovation Competition Award. He was selected as a talent to the National Talents Project. Now he also works in the Department of Energy and Transportation, Science and Technology Commission, Ministry of Education, and is the CCA/CCF Fellow.

..... Program Committee Co-Chair/Host



Yueting ZHUANG

**Director of Intelligent Creativity & Digital Art Committee of CAAI
Professor of Zhejiang University
CAAI Fellow**

Prof. ZHUANG is the winner of National Science Fund for Distinguished Young Scholars of China from National Natural Science Foundation, the "Chang Jiang Scholars Program" Professor of the Ministry of Education of China and the chief scientist of 973 Project, the Director of MOE-Artificial Intelligence Collaborative Innovation Center, and the Director of MOE-Digital Library Engineering Research Center, Zhejiang University; He mainly focuses on the researches in artificial intelligence, multimedia retrieval, cross-media computing and digital library; and won the Second Prize of National Science and Technology Progress Award for several times.

PM July 25th

Forum

Intelligent Security Forum

📍 Communication Hall

🕒 18:30–22:00

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Guiguang DING Associate Dean and distinguished Research Fellow of School of Software, Tsinghua University Winner of The National Science Fund for Distinguished Young Scholars Forum Chair: Yuan FAN Board Chairman and President of DBAPPSecurity			
18:30-19:00	Redesign the Internet Service on the Basis of Block Chain	Chunming RONG	Academician of the Norwegian Academy of Engineering; Co-chair of the IEEE Blockchain Director of the China-Norwegian Innovation Center of the United Nations Industrial Development Organization
19:00-19:30	New Safe Internet Operation Model in the Era of Digital Economy	Bo LIU	Chief Scientist of DBAPPSecurity Vice Chair of Jiangzhiheng Cyber Security Research Center, Zhejiang Lab
19:30-20:00	On the Application of Computer Vision Technology in Intelligent Security	Jungong HAN	Chair Professor of Computer Science with Aberystwyth University UK HEA Fellow
20:00-20:30	Analysis on the Target Perception and Behavioral Event for Surveillance Videos	Weiyao LIN	Professor of Shanghai Jiaotong University
20:30-21:00	Building Agile Delivery Capacity for Intelligent Industry	Jun YIN	Vice President of R&D Center, Zhejiang Dahua Technology Co. Ltd.
21:00-22:00	Panel: Smart Security in the New Infrastructure Construction		

..... Forum Chair/Host



Guiguang DING

**Associate Dean and distinguished Research Fellow of School of Software, Tsinghua University
Winner of The National Science Fund for Distinguished Young Scholars**

Prof. DING is the doctoral supervisor, and the Deputy Director of National Research Center For Information Science And Technology. He mainly focuses on the researches of visual perception, machine learning and data retrieval, especially the researches of visual perception, the theories and methodologies of efficient retrieval and weakly supervised learning. He has presided over dozens of programs under the NSFC Distinguished Youth Science Funds Project, Key NSFC Project, key R&D projects, National 973 Project, and National 863 Project; published nearly 100 papers; obtained 25 invention patents; and won the second prize of the National Scientific and Technological Progress Award.

..... Forum Chair



Yuan FAN

Board Chairman and President of DBAPPSecurity

Mr. FAN has dedicated to technological R&D and project management in world-famous security companies in the Silicon Valley, and studied on online application security, database security and auditing and Compliance in depth. He has presided over multiple national, provincial and municipal science and technology programs as NDRC hi-tech industrialization program, MIIT Electronic Development Fund program, MOST Torch Program, etc.; and won the titles of MOST "Scientific and Technological Innovation and Entrepreneurship Talent," Zhejiang Distinguished Entrepreneur of Software Industry, and Top 10 Distinguished Young Entrepreneurs of Yangtze River Delta. He also serves as the member of the Standing Committee of Zhejiang Provincial CPPCC, the Vice Chair of Zhejiang Association for Science and Technology, and the member of National Information Security Standardization Technical Committee.

..... Guest Speaker



Chunming RONG

**Academician of the Norwegian Academy of Engineering
Co-chair of the IEEE Blockchain
Director of the China-Norwegian Innovation Center of the United Nations Industrial Development Organization**

His research areas include blockchain, secure access control, and data privacy protection. He has published more than 200 papers multiple internationally authoritative journals and hosted more than 20 international projects, covering energy networking, smart cities, and smart healthcare.

..... Guest Speaker



Bo LIU

**Chief Scientist of DBAPPSecurity
Vice Chair of Jiangzhiheng Cyber Security Research Center, Zhejiang Lab**

Dr. LIU was the machine learning scientist at Facebook. He mainly focuses on the researches of big data, AI and cybersecurity. He has published nearly 20 SCI papers, with over 5,000 citations. He led and joined the research and development of 6 open source software for big data analysis and machine learning; presided over 5 national and provincial key research programs; and obtained over 100 technological invention patents concerning intelligent threat detection, AI anomaly analysis, UEBA and cybersecurity reasoning.

..... Guest Speaker



Jungong HAN

Chair Professor of Computer Science with Aberystwyth University UK; HEA Fellow

Dr. HAN has participated in multiple EU and UK governmental research programs; and published over 50 papers on computer vision, artificial intelligence and machine learning on IEEE/ACM Transactions, and over 40 papers on CCF A conferences, with the total 5,200 Google Scholar citations, and 1,500 citations with a first-authored paper. He has won the Technology & Engineering Emmy Award in 2017, and worked for multiple famous European academic institutions and higher education institutions as Eindhoven University of Technology, Centrum Wiskunde & Informatica, Lancaster University and The University of Warwick. He now serves as the Associate Editor of SCI journals as Neurocomputing and IET Computer Vision.

..... Guest Speaker



Weiyao LIN

Professor of Shanghai Jiaotong University

He mainly focuses on the researches of computer vision, visual surveillance, video behavior comprehension, video and semantic information coding, etc. He currently serves as the Editorial Board Member of journals as IEEE Trans. Image Processing, IEEE Trans. CSVT and IEEE Trans. ITS, as well as the area chair of academic conferences as BMVC'19, MM'18, ICIP'19 and ICME'18. He has won the titles and honors as MOE Young Chang Jiang Scholar, the ICME' 19 Multi-media Rising Star, and the Shanghai May 5th Youth Medal.

..... Guest Speaker



Jun YIN

Vice President of R&D Center, Zhejiang Dahua Technology Co. Ltd.

Mr. YIN is the Director of Advanced Technology Institute and Smart City Institute, Zhejiang Dahua Technology Co., Ltd., the Deputy Director of National Enterprise Technology Center, the Vice President of Zhejiang Key Enterprises Institute, and the Director of Zhejiang Engineering Research Center. He mainly focuses on the technologies of audio and video system application, artificial intelligence, network transmission, chip design, etc. He has led multiple national, provincial and municipal new and hi-tech programs; and won the first prize of Zhejiang Scientific and Technological Progress Award, the 19th China Excellent Patents Award, the second prize of Zhejiang Scientific and Technological Progress Award, and the A&S Security and Defense Innovation Award.

PM July 25th

Forum

The Second AI Ethics Forum in the Global Context

Meeting Room – 4

19:00–22:00

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Xiaoping CHEN Director and Professor of Lab of Robotics, University of Science and Technology of China

Guoyu WANG Professor of School of Philosophy

Distinguished Professor of MOE “Chang Jiang Scholars” Program Fudan University

19:00-19:30	Operationalising AI principles, globally	Kay Firth-Butterfield	Head of AI and Machine Learning & Member of Executive Committee World Economic Forum
19:30-20:00	Ethical governance of AI from a cross-cultural perspective	Guoyu WANG	Professor of School of Philosophy Distinguished Professor of MOE “Chang Jiang Scholars” Program Fudan University
20:00-20:30	Putting Responsible AI into Action, Mobilizing Technologies to Combat COVID-19	Lifan LUO	Assistant General Counsel of Microsoft General Manager of the Legal Department of Microsoft’s Asia R&D Group
20:30-21:00	From Machine Learning to Social Learning: Rethinking about the Development of Artificial Intelligence	Zheng LIANG	Deputy Director of China Institute for Science & Technology Policy Vice President and Professor of Institute for AI International Governance Tsinghua University
21:00-21:30	Ethical challenges from the true story of AI technology: Six big issues	Xiaoping CHEN	Director and Professor of Lab of Robotics, University of Science and Technology of China
21:30-22:00	Panel : AI Ethics Forum in the Global Context		

..... Forum Chair/Host/Guest Speaker



Xiaoping CHEN

Director and Professor of Lab of Robotics, University of Science and Technology of China

Prof. CHEN is also the Director of the Innovation Base for Technical Standard of Robot, the Executive Member of the Global AI Council, the Chairman of China’s RoboCup Committee, and trustee of RoboCup Federation. He was the Chair of Robotics Track of IJCAI 2015, and the Chair of 2015 and 2018 RoboCup Competition and Symposium. He won the USTC President Award for Outstanding Research in 2010, the IEEE ROBIO 2016 Best Paper Award, the Best Autonomous Robot Award and the Universal Robot Skill Award at IJCAI’2013, as well as 12 championships and other awards at RoboCup. He put forward the principle of difference-utilizing and open knowledge approach in intelligent robotics, which have been realized and tested continuously on Kejia and Jiajia robots.

..... Forum Chair/Host/Guest Speaker



Guoyu WANG

**Professor of School of Philosophy
 Distinguished Professor of MOE “Chang Jiang Scholars” Program Fudan University**

Prof. WANG is the Director of the Center for Biomedical Ethics and Applied Ethics, FUDAN University, and the doctoral supervisor. She dedicates to the researches of hi-tech ethics and governance; and works as the chief expert of “Study on Hi-tech Ethics”, the key program of the National Social Science Fund of China, and the chief scientist of “Study on the Ethical Policy, Law and Regulation Frameworks of Precision Medical Care”, the key program of the National Key Research and Development Project.

..... Guest Speaker



Kay Firth-Butterfield

**Head of AI and Machine Learning & Member of Executive Committee
 World Economic Forum**

In the UK she is a Barrister (Doughty Street Chambers) and part-time Judge who has worked as a mediator, arbitrator, business owner and professor. In the United States, she has been a Professor of Law and International Relations and co-founded AI Global. She was the world’s first Chief AI Ethics officer in 2014 and created the AIEthics twitter hashtag. Kay is Vice-Chair, The IEEE Global Initiative for Ethical Considerations in Artificial Intelligence and Autonomous Systems and was part of the group which met at Asilomar to create the Asilomar AI Ethical Principles. Kay has advanced degrees in Law and International Relations. Kay regularly speaks to international audiences addressing many aspects of these challenging technical, economic and social changes. She is a Master of the Inner Temple, London and serves on the Lord Chief Justice’s Advisory Panel on AI and Law.

..... Guest Speaker



Lifan LUO

**Assistant General Counsel of Microsoft
 General Manager of the Legal Department of Microsoft’s Asia R&D Group**

Dr. LUO is responsible for legal matters, and other affairs of ARD relating to cyber security laws, regulations and policies. He was the General Manager of Government and Corporate Affairs for Microsoft China, the Associate General Counsel for Patents for Microsoft’s Server and Tools Business, the Director of IP Licensing, Senior Licensing Counsel, and the lead patent attorney for Windows Division.

..... Guest Speaker



Zheng LIANG

**Deputy Director of China Institute for Science & Technology Policy
 Vice President and Professor of Institute for AI International Governance
 Tsinghua University**

Prof. LIANG once visited MIT Industrial Performance Center as the Fulbright Visiting Research Scholar. He mainly focuses on the researches of scientific and technological innovation policy, R&D globalization, standard and intellectual property and emerging technology governance. He has published over 70 papers on both national and international journals as National Science Review, Journal of Informetrics, World Economy, etc.; acted as the member of the Expert Team of National Innovation Survey System, and the member of the Expert Team for China-U.S. Innovation Dialogue; and participated in multiple key national programs as the national mid- and long-term scientific and technological development planning and strategy research.

Smart Health-care Forum

Meeting Room – 5

18:30–22:00

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Hongcai SHANG Director of the MOE Key Lab of Chinese Internal Medicine (Beijing University of Chinese Medicine)
Laureate of the National Science Fund for Distinguished Young Scholars

Yi ZHANG Deputy Secretary-general of CAAI; Academic Dean and Professor of College of Computer Science, Sichuan University; IEEE/CAAI Fellow

18:30-19:20	Towards Intelligent Diagnosis: Deep Learning for Precise and Efficient Medical Image	Pheng Ann Heng	Professor of Department of Computer Science and Engineering, Chinese University of Hong Kong MOE Cheung Kong Scholar
19:20-20:00	Radiomics and Its Clinical Application Based on Artificial Intelligence and Medical Big Data	Jie TIAN	Professor of School of Biological Science and Medicine Engineering, Beihang University; IEEE/ SPIE/IAMBE/AIMBE/OSA/ISMRM/IAPR Fellow
20:00-20:40	Practice in Intelligent Engineering of TCM Diagnosis and Treatment	Dong WANG	Dean of the Institute of Health Sciences and Technology CapitalBio Corporation
20:40-21:20	Visual Perception for Context-awareness in Intelligent Robotic Surgery	Qi DOU	Assistant Professor of the Chinese University of Hong Kong
21:20-22:00	Methodology and Theoretical Basis of TCM Big Data	Dongran HAN	Distinguished Professor of School of Life Sciences, Beijing University of Chinese Medicine

..... Forum Chair/Host



Hongcai SHANG

**Director of the MOE Key Lab of Chinese Internal Medicine (Beijing University of Chinese Medicine)
Laureate of the National Science Fund for Distinguished Young Scholars**

Dr. SHANG is the Executive Vice Director of Dongzhimen Hospital, the Deputy Director of International Evidence-based TCM Institute and Cardiovascular Disease Institute of Beijing University of Chinese Medicine. He was selected for the MOE New Century Excellent Talents Program, the MOST Innovative Talents Program, and the National “10,000 Talents Program”. His academic directions are mainly in the evaluation of clinical evidence, efficacy characteristics and mechanism of TCM. He has presided over multiple national key research and development programs, obtained 3 second prizes of National Scientific and Technological Progress Award, 7 first prizes of provincial and ministerial awards, 6 authorized invention patents and 6 software copyrights.

..... Forum Chair/Host



Yi ZHANG

**Deputy Secretary-general of CAAI
Academic Dean and Professor of College of Computer Science, Sichuan University
IEEE/CAAI Fellow**

Dr. ZHANG is the Chief Scientist of artificial intelligence in Sichuan University, and the Director of Sichuan 2011 Big Data Analytics Collaboration & Innovation Center. He was elected into the Elsevier List of High Citation Rate Scholars in China from 2014 to 2018; and worked as the Associate Editor of IEEE TNNLS (2009-2012) and IEEE TCyb (2004), the member of IEEE CIS Fellow Committee (2016) and IEEE CIS Award Committee (2015-2016).

..... Guest Speaker



Pheng Ann Heng

Professor of Department of Computer Science and Engineering, Chinese University of Hong Kong; MOE Cheung Kong Scholar

Prof. Heng is the co-Director of the Guangdong-Hong Kong-Macao Joint Laboratory of Human-Machine Intelligence-Synergy Systems, the Director of Virtual Reality, Visualization and Imaging Research Center, CUHK, and the Chair Professor of Center for Human-Computer Interaction, Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences. He once served as the Department Chairman and the Head of Graduate Division of CUHK Computer Science and Engineering. He mainly focuses on the researches of virtual reality, graphics and image, virtual medicine, intelligent medicine, etc. He has published over 400 academic papers, with over 15,600 Google Scholar citations and H-index of 66.

..... Guest Speaker



Jie TIAN

**Professor of School of Biological Science and Medicine Engineering, Beihang University
IEEE/SPIE/IAMBE/AIMBE/OSA/ISMRM/IAPR Fellow**

Prof. TIAN is the rewardee of the National Science Fund for Distinguished Young Scholars, and the Chang Jiang Scholar. He has won the National Scientific and Technological Progress Award, the National Invention Award, the Heliang & Heli Fund Award, and the National Innovation Award. He was included in the Most Cited Scholars List of the Elsevier Medical Science; and once served as the Chief Scientist of the MOST National Basic Research 973 Project, and the Editorial Board Member of international journals as IEEE ISBI, IEEE EMBS, IEEE BIBM, European Radiology, etc.

..... Guest Speaker



Dong WANG

Dean of the Institute of Health Sciences and Technology CapitalBio Corporation

Dr. Dong WANG is a member of the Expert Group for the Technological Response for Active Health and Aging of the Ministry of Science and Technology and the Secretary General of the Medical Instrument Branch of China Instrument and Control Society. He was in charge of the development of over 40 products in the area of gene diagnosis, and intelligent diagnosis and treatment with traditional Chinese medicine. He also presided over the key projects funded by the Ministry of Science and Technology, Beijing Municipal Science & Technology Commission and Beijing Municipal Commission of Economy and Information Technology. He owns rights to 35 patents, eight software copyrights, and formulated four national standards. He has won China Patent Award, Beijing Nova Program, the excellent worker of the National Engineering Research Center, Beijing Outstanding Young Talents, and MAO Yisheng Beijing Youth Science and Technology Award.

..... Guest Speaker



Qi DOU

Assistant Professor of the Chinese University of Hong Kong

Prof. DOU mainly focuses on the advanced machine learning methods for medical image computing and surgical robotics perception, and the generalization, robustness and multi-modal information integration of neural network in real, complicated scenarios. She has won the Best Paper Award of Medical Image Analysis-MICCAI, MICCAI Young Scientist Award Finalist, the Hong Kong Institute of Science Young Scientist Award, the ISBI LUNA the champions of ISBI LUNA Pulmonary Nodule Testing Competition, the MICCAI Operating Procedure Identification Competition 2016 and 2019, and the NeurIPS/MICCAI Travel Award. She has published over 50 papers on medical imaging, artificial intelligence and robotics conferences and journals as TMI, MedIA, TBME, Radiology, MICCA, NeurIPS, CVPR, AAAI, ICRA, etc., with Google Scholar H-index of 27. She also acts as the area chair of MIDL'19, and Reviewers for multiple journals and international conferences.

..... Guest Speaker



Dongran HAN

Distinguished Professor of School of Life Sciences, Beijing University of Chinese Medicine

Prof. HAN is the academic leader in big data of Chinese medicine. He has published 3 papers on Science, with the average IF>26. He mainly focuses on the TCM big data and new TCM ecosystem, with the aims to demonstrate the efficacy of Chinese and western medicine and relevant theories, inspire the researches of future medicine and the big-data-based informatics, restructure the research data used in medicine, psychology, sociology and education, and combine them with the bioinformatic data, in order to reveal the internal correlation and profound meanings of the life information.

AI Youth Forum

Meeting Room – 6

19:00–22:15

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Yiqun LIU Deputy Secretary-General of CAAI, Professor of Tsinghua University

Leading talent of the National Scientific and Technological Innovation Program

Wanxiang CHE Professor of School of Computer Science and Technology, Harbin Institute of Technology

MOE Young Chang Jiang Scholar

19:00-19:25	Exploration and Thinking on the Application of Intelligent Voice Engine in Driving Scenario	Feng LIN	Vice President of Intelligent System Engineering with Megatronix (Beijing) Technology Co., Ltd.
19:25-19:50	Acquire Language Intelligence, Inject Knowledge into Dialogue	Rui YAN	Assistant Professor of Wangxuan Institute of Computer Technology, Peking University
19:50-20:15	Challenges and Opportunities in the Deep Learning Self-monitoring and Pre-training Era	Dianhai YU	Chief Architect of Baidu Deep Learning Platform--PaddlePaddle
20:15-20:40	Multi-modal Conversational System	Liqiang NIE	Professor of Shandong University Director of Shandong AI Institute
20:40-21:05	Seamless Natural Communication between Humans and Machines	Zhou YU	Assistant Professor of UC Davis Computer Science Department
21:05-21:30	Dialogical Information Retrieval	Chenyan XIONG	Senior Research Fellow in AI with MSRA
21:30-22:15	Panel: Future-oriented Intelligent Conversational System		

..... Forum Chair/Host



Yiqun LIU

Deputy Secretary-General of CAAI**Professor of Tsinghua University****Leading talent of the National Scientific and Technological Innovation Program**

Prof. LIU mainly focuses on the researches of information retrieval, internet search technologies and natural language processing. He acts as the Editor-in-Chief of Foundations and Trends in IR (SCI 1), and the Chair of ACM SIGIR2018 (CCFA) TPC; won multiple titles, honors and awards as the MOST Scientific and Technological Innovation Leader, the first prize of Beijing Scientific and Technological Progress Award, the BAAI Scholar, the first prize of Qian Wei-chang Chinese Information Processing Innovation Award for Young Scholars, the Youth Fund from the Key Program of National Natural Science Foundation of China; and presided over the National Key Research and Development Project.

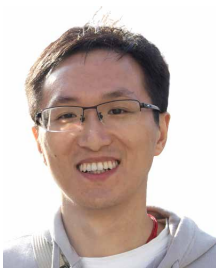
..... Forum Chair/Panel Host



Wanxiang CHE

**Professor of School of Computer Science and Technology, Harbin Institute of Technology
MOE Young Chang Jiang Scholar**

Prof. CHE is the doctoral supervisor, the MOE Young Chang Jiang Scholar, the Young Long Jiang Scholar. He was nominated for the AAAI 2013 Best Paper Award. He led the research and development of language technology platform (LTP), which was shared by over 600 organizations, and authorized to Baidu, Tencent and Huawei. He has won the first place in CoNLL 2018 and 2019, and the first prize of 2016 Heilongjiang Scientific and Technological Progress Award. His Advanced Programming Language (Python) course was rewarded as the National Excellent Online Open Course.



Feng LIN

Vice President of Intelligent System Engineering with Megatronix (Beijing) Technology Co., Ltd.

Mr. LIN has been dedicating to the research and development of intelligent system in the intelligent driving scenario. He once worked for NIO, responsible for the design and realization of intelligent voice interaction system.

..... Guest Speaker



Rui YAN

Assistant Professor of Wangxuan Institute of Computer Technology, Peking University

Dr. YAN is the doctoral supervisor. He was the senior researcher and developer in Baidu, the adjunct professor of Central China Normal University and Central University of Finance and Economics. He has investigated several open-domain conversational systems and dialog systems in vertical domains. Till now he has published more than 100 highly competitive peer-reviewed papers. He served as a (senior) program committee member and area chair for several top-tier venues. He gave tutorials about conversational systems at various top-tier conferences.

..... Guest Speaker



Dianhai YU

Chief Architect of Baidu Deep Learning Platform--PaddlePaddle

Dr. YU dedicates to the research and development of machine learning and natural language processing technologies, and platform construction. He has published over 10 papers on international conferences; participated in the National 973 Project, National Key Research and Development Program, and Scientific and Technological Innovation 2030 as a key member; and won the first prize of CIE Scientific and Technological Progress Award, and the EEF Distinguished Engineers Award.

..... Guest Speaker

..... Guest Speaker



Liqiang NIE

**Professor of Shandong University
Director of Shandong AI Institute**

Prof. NIE is the doctoral supervisor. He was elected for the National Overseas High-level Talents Program. He has presided over the NSFC general programs and key programs, MOST key R&D program, Shandong Distinguished Young Scholars program, 10-million Enterprise programs, etc. He mainly focuses on the research of multi-media retrieval. He has published over 100 papers on international conferences as CCF A or journals as ACM/IEEE, and 4 monographs, with over 7,200 Google Scholar citations. He also won the ACM Chinese Rising Star Award and the nomination of SIGIR 2019 Best Paper Award.

..... Guest Speaker



Zhou YU

Assistant Professor of UC Davis Computer Science Department

Dr. YU mainly focuses on the dialogue systems, language understanding and generation, vision and language, human-computer interaction and social robots. She has built various dialogue systems that have a real impact, such as the job interview training system, the depression screening system, and the second language learning system. She was elected into the Forbes 2018 30 under 30 in Science; nominated for the ACL 2019 Best Paper Award; and rewarded with the 2018 Amazon Alexa Prize.

..... Guest Speaker



Chenyan XIONG

Senior Research Fellow in AI with MSRA

Dr. XIONG mainly focuses on the interdisciplinary fields of deep learning, semantics and information retrieval. Her research interests include large-scale text understanding, dialogue information and neural information retrieval.

AM July 26th

Forum

Brain Science & Artificial Intelligence Forum

📍 Communication Hall

🕒 09:00–12:30

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Tianzi JIANG Research fellow of the Institute of Automation, Chinese Academy of Sciences Foreign Member of Academia Europaea; IEEE/AIMBE Fellow Feng WU Professor of University of Science and Technology of China; IEEE Fellow			
09:00-09:30	Circuit mechanisms that mediate sharp wave oscillations in the amygdala	Pankaj Sah	Professor of the University of Queensland Director and Professor of Queensland Brain Institute
09:30-10:00	Study on the Integration of Network Intelligence and Brain Informatics	Ning ZHONG	Deputy Director of Neuroscience & AI Committee, CAAI Professor of Maebashi Institute of Technology
10:00-10:30	Deep learning in Brain Imaging	Dewen HU	Professor of School of Intelligent Science National University of Defence Technology
10:30-11:00	Brain-inspired Intelligence in an Open Environment	Leon Tsao	Deputy Director of Intelligent Media Committee, CAAI Dean and Professor of Neuroscience and Intelligent Media Institute, Communication University of China
11:00-11:30	From Brain Network to Brain-like Computing	Shan YU	Deputy Director and Research Fellow of National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences
11:30-12:00	Prospect of Neuromorphic Computing	Huajin TANG	Professor of Zhejiang University
12:00-12:30	Towards AI-based diagnosis of brain diseases via multi-mode data	Feng XU	Deputy Secretary-General of CAAI Associate Professor of School of Software, Tsinghua University Winner of the National Science Fund for Outstanding Young Scholars

..... Forum Chair/Host



Tianzi JIANG

**Research fellow of the Institute of Automation, Chinese Academy of Sciences
Foreign Member of Academia Europaea; IEEE/AIMBE Fellow**

Dr. JIANG is the Director of the Brainnetome Center and the Director of the Key Lab of Brainnetome Center. He works as Associate Editors/Section Editors for several journals, including IEEE Transactions on Cognitive and Developmental Systems. He is the President of the Beijing Society for Brainnetome and Brain-inspired Intelligence, the Executive Member of the Council of Chinese Neuroscience Society (CNS) and the President of Consciousness and its Disorder Branch, the Executive Member of the Council of Chinese Society for Anatomical Sciences (CSAS) and the President of Brainnetome Branch, and the Chair of 2021 International Joint Conference on Neural Network. His research interests including multiscale Brainnetome atlas, Brainnetome atlas guided robotics and brain-computer interaction, and early diagnosis and prevention of brain diseases. He was awarded the first prize of Wu Wenjun AI Science & Technology Award and the second prize of National Natural Science Award.

..... Forum Chair/Host



Feng WU

Professor of University of Science and Technology of China; IEEE Fellow

Feng WU is the Director of the National Engineering Laboratory for Brain-inspired Intelligence Technology and Application (NEL-BITA), the Distinguished Young Scholar of the National Science Foundation, and the winner of 1 Second Prize of National Natural Science Award and 2 Second Prize of National Technology Invention Award. He mainly focuses on the researches in video coding and communication, multi-media content analysis and artificial intelligence, and led over 10 key research programs; published over 300 papers; obtained over 80 Chinese and American patents, including over 10 key technologies adopted by International Standard H.264, H.265 and National Standard AVS, and widely applied to Huawei Kirin chip and Microsoft media player. He also works as the Editor-in-Chief of IEEE TCSVT and the Chair of IEEE Data Compression Standard Committee.

..... Guest Speaker



Pankaj Sah

**Professor of the University of Queensland
Director and Professor of Queensland Brain Institute**

Prof. Sah is a renowned expert in excitatory synapses and synaptic plasticity of the amygdala. He once served as the head of John Curtin School of Medical Research at the Australian National University, and a laboratory head in the Department of Physiology at the University of Newcastle. He mainly focuses on the amygdala using a combination of molecular tools, electrophysiology, anatomical reconstruction and calcium imaging, and serves as the Editor-in-Chief of the Nature Partnership Journal. He has published over 110 papers on multiple international journals.

..... Guest Speaker



Ning ZHONG

**Deputy Director of Neuroscience & AI Committee, CAAI
Professor of Maebashi Institute of Technology**

Prof. ZHONG is the Director of Knowledge & Information System Research Office, Maebashi Institute of Technology, the Director of Beijing International Science and Technology Cooperation Base of Brain Information Intelligent Service, the founder and Chairman of Web Intelligence Consortium, the Chairman of the IEEE TF-BI, the Founding Editor-in-Chief of Web Intelligence, founder and Editor-in-Chief of Brain Informatics, and Brain Informatics and Health series, the initiator and Chairman of the Steering Committee of IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology and International Conference on Brain Informatics. He mainly focuses on researches in artificial intelligence, web intelligence, brain informatics, knowledge discovery and data mining.

..... Guest Speaker



Dewen HU

Professor of School of Intelligent Science, National University of Defence Technology

Prof. HU mainly focuses on the teaching and researches of pattern recognition and intelligent system, brain science and cognitive science, control theory and engineering, etc. He presided over more than 10 research topics for the National Key Research and Development Project; published over 300 papers and articles in Science Advances, Brain, PNAS, NeuroImage, IEEE T-PAMI and Automatica; and obtained 2 second prizes of the State Natural Science Award, and the honors as the MOE Chang Jiang Scholars Distinguished Professor, the National Excellent Scientific and Technological Workers and the National Innovation Competition Award. He also acts as the member of the Editorial Board of Neural Networks and IEEE T-SMC: Systems.

..... Guest Speaker



Leon Tsao

**Deputy Director of Intelligent Media Committee, CAAI
 Dean and Professor of Neuroscience and Intelligent Media Institute
 Communication University of China**

Prof. Tsao is the member of CAAI Board of Directors, one of the first group of appointed experts for the "Neuroscience Research" Steering Group, and the member of the Council of Western Returned Scholars Association·Overseas-educated Scholars Association of China. He mainly focuses on the construction and application of brain-inspired intelligence and simulation platform; built NiMiBrain, the large-scale efficient brain simulation platform; and combined the brain-inspired computing and deep learning to realize the intelligent modern media technology.

..... Guest Speaker



Shan YU

Deputy Director and Research Fellow of National Laboratory of Pattern Recognition, Institute of Automation, Chinese Academy of Sciences

Dr. Yu is Deputy Director of Beijing Key Laboratory for Brainnetome, his research areas include systems and computational neuroscience, brain-inspired computing and brain-machine interface. Specifically, his interests focus on how complex neuronal networks in the brain process information and direct behavior, as well as how to apply brain-inspired mechanisms to design network structure and learning algorithm for artificial intelligence.

..... Guest Speaker



Huajin TANG

Professor of Zhejiang University

Prof. TANG's research interests include brain-like computing, neuromorphic computing and chip, intelligent robotics, etc. He has been PI for multiple projects granted by NSFC, MOST Key R&D Program for Intelligent Robots, and ASTAR Singapore. He worked for STMicroelectronics, Queensland Brain Institute of the University of Queensland, Institute for Infocomm Research, ASTAR Singapore as the Robotic Cognition Lab Head, and Sichuan University as Director of Neuromorphic Computing Research Center. He received the Outstanding Paper Award from top AI journals such as IEEE TNNLS and IEEE CIM. Currently, he is Associate Editor for IEEE TCDS, Neural Networks, Frontiers in Neuromorphic Engineering, and on Board of Governor of International Neural Networks Society.

..... Organizing Committee Co-Chair/Guest Speaker



Feng XU

**Deputy Secretary-General of CAAI
 Associate Professor of School of Software, Tsinghua University
 Winner of the National Science Fund for Outstanding Young Scholars**

Prof. XU mainly focuses on the researches of artificial intelligence, smart medical care, VR/AR, etc.; published over 40 papers; obtained over 10 Chinese and American talents; and won the Provincial Technological Invention Award twice. He is now working as the TPC members of Pacific Graphics and Symposium on Graphics, as well as the Editorial Board Member of CAAI Transactions on Intelligent Technology.

Machine intelligence of Frontier Forum

Meeting Room – 1

08:30–12:30

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Lihua ZHANG Executive vice president and Distinguished Professor of Intelligent Robot Research Institute, Fudan University Jianru XUE Professor of Xi'an Jiaotong University; Distinguished Professor of MOE Chang Jiang Scholars Program CAA Fellow Panel Host: Yan HUANG Partner of Lantern Capital			
08:30-08:40	Leaders' speeches	Qionghai DAI	President of CAAI; Academician of Chinese Academy of Engineering; Dean and Professor of School of Information and Technology, Tsinghua University; CAAI Fellow
08:40-08:50	Development of Machine Intelligence	Lihua ZHANG	Executive vice president and Distinguished Professor of Intelligent Robot Research Institute, Fudan University
08:50-09:20	High-confidence Intelligent Connectivity Development and Prospect	Xiuzhen CHENG	Tenured Professor of George Washington University Dean and Professor of School of Computer Science and Technology, Shandong University ; IEEE Fellow
09:20-09:50	Smart sensors and their applications	Monier Maher	Senior Director of digital architecture with Uhnder Monier
09:50-10:20	Design Optimizations for Deep Neural Networks	Zhongfeng WANG	Distinguished Professor of Nanjing University IEEE Fellow
10:20-10:50	FAW Strategic Measures of AI Technology	Bo CHEN	General Manager of FAW (Nanjing) Scientific and Technological Development Co., Ltd. Director of FAW Artificial Intelligence Institute
10:50-11:20	Autonomous Robot Evolution	Andy Tyrrell	Dean and Professor of the Department of Electronic Engineering University of York UK; IET Fellow
11:20-11:50	AI in Medical Imaging: from Image Formation to Image Understanding	Xiang Sean ZHOU	Co-CEO of United Imaging Intelligence Inc.
11:50-12:30	Panel: Future Direction and Application of Cutting-edge Machine Intelligence Technologies		

..... Forum Chair/Host/Guest Speaker



Lihua ZHANG

Executive vice president and Distinguished Professor of Intelligent Robot Research Institute Fudan University

Prof. Zhang is also the executive deputy director of Engineering Research Center of AI & Robotics, Ministry of Education, and Director of Engineering Research Center of AI and Unmanned Vehicle Systems of Jilin Province. He has served as a responsible expert for the new generation artificial intelligence major project of national science and technology innovation 2030, and the leader of the Action Recognition Working Group of the Biometrics Identification Subcommittee of China National Information Technology Standardization Network (TC28/SC37). His main research fields include artificial intelligence theory such as machine intuition, ternary space swarm intelligence, computer vision, big data analysis and visualization, intelligent robot, intelligent computation and AI chip, etc. He has won multiple honors and awards such as "Top Innovation Talents of Jilin Province".

..... Forum Chair/Host



Jianru XUE

**Professor of Xi'an Jiaotong University
Distinguished Professor of MOE Chang Jiang Scholars Program
CAA Fellow**

Prof. XUE mainly focuses on the researches of computer vision, pattern recognition, machine learning, autonomous driving and hybrid-augmented intelligence. He has published over 100 papers on international journals and conferences; been elected as the Scientific and Technological Innovation Leaders of the National "10,000 Talents Program," MOST Young and Mid-aged Talents in Scientific and Technological Innovation, and MOE New Century Talents; and won the second prize of National Natural Science Award, the second prize of National Technological Invention Award, the first prize of MOE Natural Science Award, the IEEE ITS Distinguished Research Team Award (2014), the Best Application Paper Award of Asian Conference on Computer Vision, the CAA Young Scientist Award, and the Shaanxi Youth Science & Technology Award.

..... General Co-Chair/Guest Speaker



Qionghai DAI

President of CAAI; Academician of Chinese Academy of Engineering; Dean and Professor of School of Information and Technology, Tsinghua University; CAAI Fellow

Dean of the Beijing National Research Center for Information Science and Technology. He was a recipient of the National Science Fund for Distinguished Young Scholars from the National Natural Science Foundation of China (NSFC) in 2005, appointed as a Distinguished Professor of the "Changjiang Scholar Award Program" by the Ministry of Education (MoE) in 2009, and winner of the 2017 National Innovation Competition Award. Prof Dai's research mainly focus on artificial intelligence (stereovision) and computational photography, and has long been devoted to the theoretical and technological innovation in these fields. He was the principal scientist of several national major grants including The Major State Basic Research Development Program of China (973 program) from Ministry of Science and Technology, Special Fund for Research on National Major Research from the NSFC. He has developed a video rate Real-time Ultra large Scale High resolution microscope (RUSH), which is expected to advance the progress of brain science and tumor metastasis. He won the second prize of The State Scientific and Technological Progress Award in 2016, the first prize of The State Technological Invention Award in 2012 and the second prize of The State Technological Invention Award in 2008.

..... Guest Speaker



Xiuzhen CHENG

**Tenured Professor of George Washington University
Dean and Professor of School of Computer Science and Technology, Shandong University
IEEE Fellow**

Prof. CHENG mainly focuses on the researches of IoT and edge computing, block chain theory and application. She once acted as the editors for 6 top-level international academic journals as IEEE TPDS, IEEE TC, IEEE TWC, etc.; the founder of CCF-C WASA; the Chair over 10 top-level international academic conferences, including ACM MobiHoc; and TPC of dozens of international academic meetings, including IEEE INFOCOM, ACM Mobihoc, etc.

..... Guest Speaker



Monier Maher

Senior Director of digital architecture with Uhnder Monier

Monier Maherr is responsible for the digital architecture and design of the next generation PMCW radar sensor. Prior to Uhnder, Monier was the Director for Product Marketing/ Management for Nvidia Gameworks, bringing physical simulations in virtual worlds to life. Before that he was the co-founder of Ageia Technologies, where he has leading the digital architecture of a physics simulation acceleration chip. He was also the co-founder of Celox Networks, where he was responsible for the R&D of the world's first OC-192 network processor.

..... Guest Speaker



Zhongfeng WANG

**Distinguished Professor of Nanjing University
IEEE Fellow**

Prof. WANG once worked for Oregon State University and Broadcom Corporation in USA; participated deeply in the design of more than 10 commercial chips. His proposals have been adopted by more than 15 international network communication standards. As the world-known expert in VLSI implementation of DSP systems, he has published more than 200 papers; received multiple international best paper awards; served as the Associate Editor of IEEE journals, and the TPC member of IEEE conferences; and won multiple honors and awards as "Innovation and Entrepreneurship Talents of Jiangsu", the Leading Talents of "Innovation and Entrepreneurship Team of Jiangsu", and the Class-A Talent of "Top Technological Experts of Nanjing".

..... Guest Speaker



Bo CHEN

**General Manager of FAW (Nanjing) Scientific and Technological Development Co., Ltd.
Director of FAW Artificial Intelligence Institute**

Mr. CHEN led the developments of AI autonomous driving system, AI big data, electronic and electrical architecture and information security for over 10 whole vehicle programs; fulfilled multiple national technological development programs, including the AI system of the first L4 autonomous model for mass production, the first whole vehicle OTA system, and the first "terminal-pipeline-cloud" information security defence system for mass production; won multiple provincial and ministerial scientific and technological progress awards, "Huang Da-nian Research Team," and FAW Innovation Model; and obtained over 40 patents. He mainly focuses on the deep integration of AI and the automotive industry, including computer vision and big data driven technologies.

..... Guest Speaker



Andy Tyrrell

**Dean and Professor of the Department of Electronic Engineering
University of York UK; IET Fellow**

Prof. Tyrrell has served as General Chair for several international conferences as ICES, IPCAT and CEC (IEEE Congress on Evolutionary Computation). He mainly focuses on the design of biologically-inspired architectures, computer engineering, robotics, evolvable hardware, and FPGA system design; published over 350 papers; and attracted funds in excess of £10M from major funding bodies in UK and EU. He is the Editor-in-Chief of IET journal on Computers & Digital Techniques.

..... Guest Speaker



Xiang Sean ZHOU

Co-CEO of United Imaging Intelligence Inc.

Dr. ZHOU ever worked as the head and Chief Expert of the Global Computer-aided Diagnosis Group, Siemens Healthineers; and won the title of 2012 "Annual Inventor of Siemens" . He obtained over 60 international patents, and his publications in computer vision, multi-media and medical imaging AI were cited for over 10,000 times, reaching h-index 46.

..... panel host



Yan HUANG

Partner of Lantern Capital

Mr. HUANG is the Secretary-General of Shanghai Private Equity Association, the former partner and head of Shanghai Office of the Vertex Ventures (The VC platform of Temasek Holdings). He has successfully invested over 20 high-growth enterprises in AI and intelligent manufacturing industries. He acts as the Board Directors in multiple investment institutions, and has over 17 years of investment experiences as well as abundant fund raising and management experiences.

AM July 25th

Forum

Sharing Intelligence Frontier Forum

Meeting Room – 5

09:00–12:30

Time	Topics	Guest Speakers	Workplaces and Positions
<p>Forum Chair/Host: Benyu ZHANG Chief Scientist of Sharing Intelligence Lab of Ant Financial Jianwei YIN Vice Dean and Professor of College of Computer Science and Technology Zhejiang University Qiushi Distinguished Professor of Zhejiang University Winner of National Science Fund for Distinguished Young Scholars</p>			
09:00-09:30	Privacy Paradox on Social Media - Can Users Have Privacy	Huan LIU	Professor of computer science and engineering Arizona State University ACM/AAAI/AAAS/IEEE Fellow
09:30-10:00	Scaling Up Privacy-Preserving Technology	Matei Zaharia	Assistant Professor of Department of Computer Science, Stanford University Co-founder and Chief Scientist of Databricks
10:00-10:30	Statistical Inference for Spatio-Temporal Self-Exciting Point Processes	Yao XIE	Associate Professor of Department of Industrial and System Engineering; Deputy Director of Machine Learning Center, Georgia Institute of Technology
10:30-11:00	Computational and Statistical Efficiency of Policy Optimization	Zhaoran WANG	Assistant Professor of IEMS and CS (by courtesy) at Northwestern University
11:00-11:30	Deep Learning Security: From the NLP Perspective	Shouling JI	Research Fellow of the "100 Talent Program" of Zhejiang University
11:30-12:00	Study on the Shared-learning Based Credit Model for SMEs	Xiaolin ZHENG	Deputy Director and Professor of Institute of Artificial Intelligence, Zhejiang University
12:00-12:30	Sharing Intelligence Technology Based AI Privacy Protection	Jun ZHOU	General Manager of the Department of Sharing Intelligence, Ant Financial Senior Expert of Financial Intelligence Lab, Alibaba DAMO Academy

..... Forum Chair/Host



Benyu ZHANG

Chief Scientist of Sharing Intelligence Lab of Ant Financial

Mr ZHANG has been engaged in AI research and development for two decades. He published 49 peer-reviewed papers with more than 11,000 citations, has 70 US patents approved and 84 US patents pending. Since he went into industry, he has initiated and led numbers of core AI systems R&D in advertising, search, and recommendation at Google and FB. Currently he leads the Secure Collaborative Intelligence Lab (SCI Lab) in Ant Financial to build the next generation data mining and AI platform. The vision is to form the "data internet" and enable data mining and AI applications to use multi-party data safely, effectively, and efficiently. This platform has been used in many financial scenarios, e.g. joint micro-loan credit with banks, joint fraud detection.

..... Forum Chair/Host



Jianwei YIN

Vice Dean and Professor of College of Computer Science and Technology, Zhejiang University
Qiushi Distinguished Professor of Zhejiang University
Winner of National Science Fund for Distinguished Young Scholars

Prof. YIN works as the head of the National Key Research and Development Project program and the member of the Expert Group of the National Mid- and Long-term Science and Technology Development Strategy; and once awarded as the Leading Talent of the “National 10,000 Talents Plan” of the Organization Department of the Central Committee of the CPC, the Leading Talent of the “Young and Mid-aged Talents of Scientific and Technological Innovation” of the Ministry of Science and Technology, and the “New Century Outstanding Talent” of the Ministry of Education. He has been focusing on the researches in intelligent data processing, modern service platform software and service system; undertook or finished over 10 national key programs, including the National Key Research and Development Project program, National Key Science and Technology Project program, the National Natural Science Foundation program, 863 Plan program and Supporting Plan program; and obtained 106 national intervention patents, 1 second prize of the National Scientific and Technological Progress Award and 4 first prizes of the Provincial Scientific and Technological Progress Award.

..... Guest Speaker



Huan LIU

Professor of computer science and engineering
Arizona State University
ACM/AAAI/AAAS/IEEE Fellow

Prof. LIU mainly focuses on developing computational methods for data mining, machine learning and social computing, and designing efficient algorithms to enable effective problem solving ranging from basic research, text/Web mining, bioinformatics, image mining, to real-world applications. One of his recent research work is privacy in social media.

..... Guest Speaker



Matei Zaharia

Assistant Professor of Department of Computer Science
Stanford University; Co-founder and Chief Scientist of Databricks

Matei Zaharia is an Assistant Professor of Computer Science at Stanford University and Chief Technologist at Databricks. He started the Apache Spark project during his PhD at UC Berkeley in 2009, and has worked broadly on other cluster computing and analytics software, including Apache Mesos, Apache Hadoop and MLflow. Today, Matei is a PI in the Stanford DAWN Lab doing research on systems for machine learning, cloud computing and privacy and security at scale. He also continues to work on data analytics systems at Databricks. Matei’s research was recognized through the 2014 ACM Doctoral Dissertation Award, an NSF CAREER Award, and the US Presidential Early Career Award for Scientists and Engineers (PECASE).

..... Guest Speaker

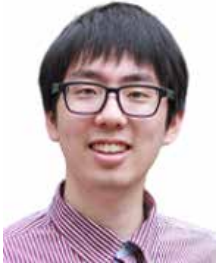


Yao XIE

Associate Professor of Department of Industrial and System Engineering; Deputy Director of Machine Learning Center, Georgia Institute of Technology

Prof. XIE’s research areas are statistics (in particular sequential analysis and sequential change-point detection), machine learning, and signal processing, in providing the theoretical foundation as well as developing computationally efficient and statistically powerful algorithms. She has worked on such problems in sensor networks, social networks, power systems, crime data analysis, and wireless communications. She received the National Science Foundation (NSF) CAREER Award in 2017. She currently serves on the editorial board of the Journal of Machine Learning Research and an Associate Editor for IEEE Transactions on Signal Processing, and Sequential Analysis: Design Methods and Applications.

..... Guest Speaker



Zhaoran WANG

Assistant Professor of IEMS and CS (by courtesy) at Northwestern University

Prof. WANG mainly focuses on the researches of interface of machine learning, statistics and optimization, especially the multi-agent reinforcement learning and game theory. He has won the AISTATS (Artificial Intelligence and Statistics Conference) notable paper award, ASA (American Statistical Association) best student paper in statistical learning and data mining, INFORMS (Institute for Operations Research and the Management Sciences) best student paper finalist in data mining, and the Microsoft fellowship.

..... Guest Speaker



Shouling JI

Research Fellow of the "100 Talent Program" of Zhejiang University

Dr. JI is the doctoral supervisor, and the member of multiple national, provincial and ministerial talent programs. He has won 7 best/excellent paper awards, GSU research award, ELSEVIER most-cited paper award, and excellent overseas Chinese students award. He mainly focuses on the researches of artificial intelligence and security, data-driven security, software and system security, big data analysis, etc. He has presided over the National Natural Science Fund key and general programs, national key research and development plan program, Zhejiang Natural Science Fund for Distinguished Young Scholars program, and the key "cyberspace security" program of Zhejiang Key research and development plan; and also participated in 8 NSF programs. He published over 100 papers and 4 monographs in English.

..... Guest Speaker

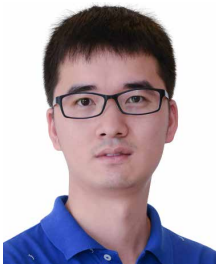


Xiaolin ZHENG

Deputy Director and Professor of Institute of Artificial Intelligence, Zhejiang University

Prof. ZHENG won the second prize of MOE Scientific and Technological Progress Award in 2018, the first prize of Zhejiang Scientific and Technological Progress Award in 2014, the second prize of Distinguished Scientific Research Results Award & Scientific and Technological Progress Award for Universities in 2010, the CGCC Special Prize for Scientific and Technological Innovation in Service Sector in 2009, the second prize of National Teaching Achievements Award in 2009, and the first prize of Zhejiang Teaching Achievements Award in 2009. He mainly focuses on the researches of artificial intelligence, intelligent e-commerce, intelligent finance, service computing, etc. In recent years, he presided over more than 10 national, provincial and ministerial programs; participated in the edition of 4 books; translated 1 book; published over 50 academic papers on national and international core journals; obtained 6 national invention patents; and registered 15 software copyrights.

..... Guest Speaker



Jun ZHOU

**General Manager of the Department of Sharing Intelligence, Ant Financial
Senior Expert of Financial Intelligence Lab, Alibaba DAMO Academy**

Mr. ZHOU is the Technical Director of the Ant Financial's machine learning platform, responsible for the core technologies as Ant graph machine learning, data security and privacy protection as well as promoting the intelligence finance. He has won 3 provincial and ministerial scientific and technological awards; published over 50 papers on AI conferences and journals as NeurIPS, KDD, etc.; applied for over 300 patents, of which over 20 have been granted; and obtained 4 software copyrights.

New Media and Social Entertainment in the AI Era Forum

Meeting Room – 3

08:30–11:40

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair: Wei WANG Chief Information Officer of SINA; Director of Sina AI Media Research Institute Yi YANG Special Honorary Professor at Zhejiang University; Professor at University of Technology Sydney; Visiting Professor, Baidu Research			
08:30-08:40	Leaders' speeches	Deyi LI	Honorary President of CAAI Academician of Chinese Academy of Engineering CAAI Fellow
08:40-09:00	"Intelligence + " Empowers New Media Ecosystem	Wei WANG	Chief Information Officer of SINA; Director of Sina AI Media Research Institute
09:00-09:20	Intelligent Understanding, Analysis and Generation of Multimedia Content	Yi YANG	Special Honorary Professor at Zhejiang University Professor at University of Technology Sydney
09:20-09:40	The Deep Learning Model inspired by Neuroscience and Its Application in the Perception of Video Spatiotemporal Information	Weiming HU	Research fellow of National Key Lab of Pattern Recognition, Institute of Automation CAS; Reardeed of the National Natural Science Fund for Distinguished Young Scholars
09:40-10:00	Protecting Multimedia Privacy against Machines	Mohan Kankanhalli	Dean and Professor of School of Computing, NUS; IEEE Fellow
10:00-10:20	Should You Believe Wikipedia?	Amy Bruckman	Professor and Senior Associate Chair of School of Interactive Computing, Georgia Institute of Technology; ACM Fellow
10:20-10:40	Artificial intelligence based Sci-tech misinformation detecting and handling	Jianbin JIN	Director of Academic Committee and Professor of the School of Journalism and Communication, Tsinghua University
10:40-11:00	AI Applications In News	Jim Kennedy	Senior Vice President of The Associated Press
11:00-11:20	Refined Data Operation in the Era of Artificial Intelligence	Yi FANG	Founder and CEO of GeTui
11:20-11:40	The Application of Machine Learning in Weibo	Junlin ZHANG	Head of AI Lab, Sina Weibo Machine Learning Team

..... Forum Chair/Guest Speaker



Wei WANG

Chief Information Officer of SINA; Director of Sina AI Media Research Institute

Mr. WANG has rich experience in internet, big data and artificial intelligence. He is responsible for the strategic planning and management of IT, big data and AI, as well as the strategic planning and development of mobile terminal products as mobile business, news APP and mobile net of SINA. He has participated in the the founding of Sina AI Research Institute, and dedicates to building a leading intelligent media platform. He once worked as the Director of Information System Department of SINA, responsible for the planning, design and building of SINA's information system. He also works as the chief member of Executive Committee, Technological Frontier Committee, China Computer Federation (CCF), and the Vice President of Beijing Software and Information Service Industry Association (BSIA).

..... Forum Chair/Guest Speaker



Yi YANG

Special Honorary Professor at Zhejiang University; Professor at University of Technology Sydney; Visiting Professor, Baidu Research

Prof. Yang's research mainly focuses on artificial intelligence, computer vision, and cross-media computing. He has received the Outstanding Doctoral Thesis award of MOE, the first prize of Zhejiang Provincial Scientific and Technological Award, the ARC Discovery Early Career Researcher Award, the ACS Gold Disruptor Award, the Google Faculty Research Award, the AWS ML Award. He is among the few who is a named highly recited research in two fields (Engineerin and Computer Science).

..... Honorary Chairman/Guest Speaker



Deyi LI

Honorary President of CAAI; Academician of Chinese Academy of Engineering; CAAI Fellow

Former President of CAAI Council. Academician Deyi LI has long engaged in the fields of computer engineering, uncertain artificial intelligence, big data and smart driving. He is the one who first proposed the "control flow data flow" graph pair theory and proved the equivalence between relational database schema and predicate logic. He proposed theories of cognitive formalization such as cloud model, cloud transformation, and data fields which can solve the problems like qualitative concept generation, similarity calculation, uncertain reasoning and intelligent control, and can also successfully control all kinds of dynamic balance posture of the inverted pendulum system. He claimed to construct a cognitive map of driving situation based on road rights, and to develop the brain for intelligent driving.

..... Guest Speaker



Weiming HU

Research fellow of National Key Lab of Pattern Recognition, Institute of Automation, CAS; Rwardee of the National Natural Science Fund for Distinguished Young Scholars

Dr. HU was elected as the scientific and technological innovation leading talent under the "10,000 Talents" Program by the Central Organization Department, the MOST young and mid-aged scientific and technological innovation leading talent, the MOLSS "Tens of Thousands Million Talents" Program, the National Young and Mid-aged Experts of Distinguished Contributions, and the Chief Scientist of the National 863 Key Program. He mainly focuses on the researches of web-based multimedia sensitive content recognition, visual motion analysis, etc. He has presided over multiple National Natural Science Fund key programs, National 863 Key Programs, and objective-oriented programs. He has published over 240 papers on national and international first-class journals, as well as influential international academic conferences and obtained over 30 patents. He won the first prize of Beijing Science & Technology Award, the first prize of Beijing Invention Patent Award, and the first prize of Wu Wen-jun AI Science & Technology Award.

..... Guest Speaker



Mohan Kankanhalli

Dean and Professor of School of Computing, NUS; IEEE Fellow

Prof. Kankanhalli mainly focuses on multimedia computing, information security and privacy, image/video processing and social media analysis. He also serves as the Editorial Board Member of multiple international journals as ACM Transactions on Multimedia Computing, Communications and Applications, Springer Multimedia Systems, IEEE Multimedia, Pattern Recognition and Journal on Big Data. He directs N-CRiPT (NUS Centre for Research in Privacy Technologies), which received funds from Singapore's National Research Foundation, and works extensively with government, business and research institution partners, with the mainly focuses on the comprehensive privacy protection of structural and non-structural data. He once directed the SeSaME (Sensor-enhanced Social Media) Center, NUS, with the focuses on the multi-source data fusion and intelligent social media analysis and research.

..... Guest Speaker



Amy Bruckman

Professor and Senior Associate Chair of School of Interactive Computing, Georgia Institute of Technology; ACM Fellow

Amy Bruckman mainly focuses on the researches of social computing, collaboration, social movement, content risk monitoring and internet ethics. She also serves as the chair of the ACM CSCW Steering Committee, and the member of the ACM CHI Academy. She has published the book "Should You Believe Wikipedia?" She led a lab to use mixed methods including qualitative interviewing, participant observation and analysis of online data to understand the existing systems and user needs, builds new tools, and study on their use in naturalistic deployments.

..... Guest Speaker



Jianbin JIN

Director of Academic Committee and Professor of the School of Journalism and Communication, Tsinghua University

Prof. JIN is the doctoral supervisor, the Executive Editor-in-Chief of the Global Media Journal, and the Editorial Board Member of multiple national and international academic journals. He focuses on the researches of new media communication and science communication, mainly including the topic influence algorithm design, information ethics, etc. He was selected into the MOE "New Century Excellent Talent Support Program" and has authored monographs such as "Science Communication: Social Cognition and Changes of Controversial Science and Technology" and "Studies on the Chinese Urban Families' Internet-surfing Inclinations", etc.

..... Guest Speaker



Jim Kennedy

Senior Vice President of The Associated Press

Mr. Kennedy once served as the Executive Director, business news editor and multi-media service manager of Product Planning at WSJ.com, the founder of Cable News Association as well as the Board Director and Chair of American Business Editors and Writers Association. He has won the Oliver S Gremlin Prize of the Associated Press.

..... Guest Speaker



Yi FANG

Founder and CEO of GeTui

Mr. FANG is the winner of the 24th Chinese Youth May 4th Medal, and the leading talent of scientific and technological entrepreneurship under the National 10,000 Talents Project. He was a member of the National University Student Entrepreneurs Delegations organized by the Publicity Department of the Communist Party of China, the Ministry of Education and the Central Committee of the Communist Youth League of China. He has won the 10th Chinese Young Entrepreneur Award, the first prize of the internet group in China Innovation and Entrepreneurship Contest, and the Earthquake Prevention and Disaster Reduction Science and Technology Award. He also serves as the Vice President of China Youth Entrepreneurs Association, the member of the Standing Committee of Zhejiang Youth Federation, the Executive Committee member of Zhejiang Federation of Industry and Commerce, the member of Hangzhou CPPCC Committee, and the President of Hangzhou New Generation Entrepreneurs Association.

..... Guest Speaker



Junlin ZHANG

**Head of AI Lab
Sina Weibo Machine Learning Team**

Dr. ZHANG once served as the senior technical expert of Alibaba. He mainly focuses on the researches of information retrieval theory and natural language processing. He has published multiple papers at ACL2006, COLING2004, IJCNLP2004, Recsys2019, ICDM2019 and other international top conferences. The search engine designed by his team ranked the first in the US Department of Defense's DARPA TREC High-precision Retrieval System Assessment. He has authored books such as "This is the Search Engine: Details of Core Technologies", "Big Data Daily: Architecture and Algorithm", etc.

AM July 26th

Forum

AI Women's Future Forum

Meeting Room – 7

09:00–12:30

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Heyan HUANG Director and Professor of the Artificial Intelligence Institute, Beijing Institute of Technology; CAAI Fellow Shengmei SHEN Chief Scientist of Pensees Technology; Managing Director of Pensees Research Institute			
09:00-09:40	Cryptography and Blockchain	Xiaoyun WANG	Academician of Chinese Academy of Sciences Professor of Chen-Ning Yang Lecture, Institute for Advanced Study, Tsinghua University IACR Fellow
09:40-10:10	Study on the AI Industry Development and Security	Libo YIN	Director of China Industrial Control Systems Cyber Emergency Response Team(CIC)
10:10-10:40	Dialogue Nature Language Understanding	Bing QIN	Tenured Professor of Harbin Institute of Technology
10:40-11:10	Knowledge-driven smart scientific and technological intelligence service	Juanzi LI	Professor of Tsinghua University
11:10-11:40	Social robots: what they can do for improving our quality of life?	Nadia Magnenat Thalmann	Life member of the Swiss Academy of technical Sciences; Director of Institute for Media Innovation, NTU Singapore Professor of University of Geneva, Switzerland
11:40-12:30	Panel: Women's Vital Strengths in the Era of AI		

..... Forum Chair/Host



Heyan HUANG

**Director and Professor of the Artificial Intelligence Institute, Beijing Institute of Technology
CAAI Fellow**

Prof. HUANG is the Former Vice President of the CAAI Council, the expert of intelligent language processing and machine translation, the Vice President of Chinese Information Processing Society of China and China Software Industry Association, the Director of Beijing Engineering Research Center of High Volume Language Information Processing and Cloud Computing Applications, the Director of Key Laboratory of Intelligent Information Processing and Information Security, Ministry of Industry and Information Technology, and the member of the MOE Steering Committee for Computer Science and Technology Education. She once presided over the National Natural Science Foundation of China program and key research program of "973 Project"; and was rewarded with the first and second prize of National Scientific and Technological Progress, the title of "National Excellent Scientific and Technological Worker", etc.

..... Forum Chair/Host



Shengmei SHEN

Chief Scientist of Pensees Technology; Managing Director of Pensees Research Institute

Ms. Shen is a well-known Chinese female scientist and internationally famed scholar in computer vision and deep learning. She once worked as the Deputy Director of Panasonic Research Lab in Singapore; obtained over 30 championships in international AI competitions; and won over 300 patents. She boasts the research and engineering experience of full stack algorithm in Computer Vision, covering AI-based Intelligent Sensing, Visual Perception and View Processing, as well as V-SLAM, Augmented Reality, Intelligent Control, and Voiceprint Recognition. She was rewarded with the Panasonic Special Award for Outstanding Technology and Leading Figures; acted as the chief editor of the ISO and IEC standards; and led the formulation of multiple international standards for audio and video.

..... Guest Speaker



Xiaoyun WANG

Academician of Chinese Academy of Sciences
Professor of Chen-Ning Yang Lecture, Institute for Advanced Study, Tsinghua University
IACR Fellow

Prof. WANG mainly focuses on the researches of cryptography theory and relevant mathematical issues. In the cryptoanalysis, he proposed the theory of collision attack on cryptographic Hash function, and broke through 5 international Hash function algorithms, including MD5 and SHA-1; and in cryptographic design, she presided over the design of Hash function SM3 as the national standard for cryptographic algorithm, which was officially used as the ISO/IEC international standard in Oct 2018. She has published over 50 papers, of which 3 won the EUROCRYPT Best Paper Award and the CRYPTO Best Paper Award. She has won the second prize of the National Natural Science Award, the Tan Kah Kee Science Award, the Qiushi Award for Distinguished Scientists, the Su Buchin Prize, the Future Science Prize--Mathematics and Computer Sciences, etc.

..... Guest Speaker



Libo YIN

Director of China Industrial Control Systems Cyber Emergency Response Team(CIC)

Professorate Senior Engineer, enjoys the State Council Special Allowance. She has long been dedicated to track and study the technologies and industrial development of industrial information and industrial cyber security, with numerous papers and several books on the integration of informatization and industrialization, industrial internet and cyber security issues, such as Blue Book of Industry and Informatization, "The belt and Road" Industrial Civilization Industrial Information Security as editor-in-chief. She has also been appointed as Vice-chairman of National Technical Committee of Informatization and Industrialization Management Standardization, and President of National Industrial Security Industry Alliance. Research achievements led by Dirctor Yin have been awarded first, second and third ministerial prizes.

..... Guest Speaker



Bing QIN

Tenured Professor of Harbin Institute of Technology

Prof. QIN is the doctoral supervisor, the Director of Research Center for Social Computing and Information Retrieval, and the leader of national key foundation project. She mainly focuses on researches of natural language processing, knowledge graph construction, text sentiment analysis and text generation. She has published over 100 papers on nationally and internationally influential journals and conferences as ACL, COLING, EMNLP, IEEE TKDE, IEEE TOIS, IEEE TASLP, etc.; presided over multiple programs of National Natural Science Fund and MOST key research and development; and won the first prize of Qian Weichang Chinese Information Processing Science and Technology Award from the Chinese Information Processing Society, and the second prize of Heilongjiang Province Technical Invention. She was elected into the lists of the Most Influential Global Women Scholars in AI (Women in AI) and AI 2000.

..... Guest Speaker



Juanzi LI

Professor of Tsinghua University

Prof. LI mainly focuses on knowledge engineering, semantic Web and text mining. She has published over 100 papers on top-level international conferences (IJCAI, AAAI, ACL, WWW, etc.) and significant academic journals (TKDE, TOIS, etc.), and presided over key National Natural Science Foundation program, the EU 7th Framework Program, as well as multiple national, international and ministerial programs.

..... Guest Speaker



Nadia Magnenat Thalmann

Life member of the Swiss Academy of technical Sciences
Director of Institute for Media Innovation, NTU Singapore
Professor of University of Geneva, Switzerland

Prof. Thalmann is a Robotician and Computer Graphics Scientist. She is the Director and founder of the MIRALab at the University of Geneva in Switzerland. She is also chairing the Institute for Media Innovation in NTU, Singapore. She serves as the Editor-in-Chief of the Visual Computer and many other journals. She has participated in over 50 European research programs, and published with her team over 600 research papers. She has won many scientific prizes and awards, including the Montreal Women of the Year, the European Association Award for Achievements in Computer Graphics, and the Humboldt Research Award in Germany.

AM July 26th

Forum

Forum of Swarm Decision-making and Control for Traffic Systems

Meeting Room – 8

09:00–12:30

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Yi ZHANG Director of Intelligent Transportation Committee, CAAI; Professor of Tsinghua University Chaozhong WU Secretary General of the Intelligent Transportation Committee, CAAI Vice President and Professor of Wuhan University of Technology			
09:00-09:25	Optimal Lane Change Maneuvers for Safe Swarms of Connected and Automated Vehicles in Highway Traffic	Christos G. Cassandras	Distinguished Professor of Boston University; IEEE/IFAC Fellow
09:25-09:50	Explorations on Development&Implementation Approaches of Collaborative Automated Driving	Bin RAN	Professor of University of Wisconsin-Madison; Distinguished Professor of Southeast University
09:50-10:15	Scenario Generation for Autonomous Vehicle Testing	Henry LIU	Director of Center for Connected and Automated Transportation Professor of University of Michigan America
10:15-10:40	Key Technology and Application of Urban Traffic Congestion Alleviation Cloud	Xinyong ZHAO	President of Hualu e-Cloud
10:40-11:05	The Application Research of Machine Learning Techniques for Intelligent Cooperative Decision and control of Traffic Groups	Hongwei GE	Deputy Dean and Professor of School of Computer Science and Technology, Dalian University of Technology
11:05-11:30	Fine Object Recognition and Deep Integration of Intelligent Connected Vehicles	Chaozhong WU	Secretary General of the Intelligent Transportation Committee, CAAI Vice President and Professor of Wuhan University of Technology
11:30-12:30	Panel: Swarm Decision-making and Control for Traffic Systems		

..... Forum Chair/Host



Yi ZHANG

Director of Intelligent Transportation Committee, CAAI
Professor of Tsinghua University

Prof. ZHANG was rewarded with the State Council's Special Allowanced in 2013, supported by the MOE Foundation for Key University Teachers in 1999, elected as the MOC Cross-century Talents Project in 2001 and the expert in advanced transportation technology by the 863 Project in 2006. He mainly focuses on the researches and implementations of intelligent vehicle-infrastructure cooperation systems (i-VICS) and advanced autopilot technology, control and analysis of modern urban traffic, researches and implementations of integrated technology for intelligent transportation systems. Meanwhile, he also gets involved in the researches of advanced sensor and network, advanced testing methods, information technology, etc.

..... Forum Chair/Host



Chaozhong WU

Secretary General of the Intelligent Transportation Committee, CAAI
Vice President and Professor of Wuhan University of Technology

Prof. WU focuses on the researches of traffic safety, intelligent transportation, vehicle-infrastructure cooperation and intelligent connected vehicle for years. He once presided over programs of National Key Research and Development Project, National 863 Project, and National Natural Science Fund; published over 50 academic papers; and obtained over 20 patents, over 10 software copyrights, 5 ministerial and industrial awards for scientific research achievements, as well as the titles of the MOE Program for New Century Excellent Talents, Excellent Young Talents of Hubei New Century High-level Talent Project, and the MOT Young and Mid-aged Leading Talents Project. He is also the member of the National Technical Committee on Intelligent Transport Systems of Standardization Administration of China.

..... Guest Speaker



Christos G. Cassandras

Distinguished Professor of Boston University; IEEE/IFAC Fellow

Prof. Cassandras mainly focuses on the researches of discrete event and hybrid system, collaborative control, stochastic optimization and computer simulation, computer and sensor network, manufacturing system and transportation system. He has published over 400 papers, and 6 books; served as the Editor-in-Chief of the IEEE Transactions on Automatic Control and Associate Editor of multiple IEEE journals, the President of IEEE Control Systems Society, the Vice Chair of CSS Council and the Publishing Committee, and the Chair of multiple IEEE committees; and won the IEEE Control Systems Technology Award, CSS Distinguished Member Award, Harold Chestnut Prize, IEEE Smarter Planet Challenge competition and BU Engineering Distinguished Scholar Award.

..... Guest Speaker



Bin RAN

**Professor of University of Wisconsin-Madison
Distinguished Professor of Southeast University**

Prof. RAN is the "VLAS Distinguished Achievement Professorship" winner, the tenured professor with the Department of Civil and Environmental Engineering, UW-Madison, the first Chinese winner of Wilbur S. Smith Distinguished Transportation Educator Award, the founder of NACOTA, the assessor of Chinese and American Natural Science Fund programs and multiple university transportation center programs, the Associate Editor of American Intelligent Transportation Journal, the Director of Autonomous Driving Committee of China Highway & Transportation Society, and the Co-director of the Technical Branch, Intelligent and Connected Autonomous Driving Committee, International Road Federation. He mainly focuses on the researches of intelligent transportation system, intelligent and connected transportation system, and vehicle-infrastructure cooperative autonomous driving system. He has published over 400 papers on both national and international journals.

..... Guest Speaker



Henry LIU

**Director of Center for Connected and Automated Transportation
Professor of University of Michigan America**

Prof. LIU once served as the Chief Scientist on Smart Transportation in Didi Chuxing, established and led the Urban Transportation Business Unit. He mainly focuses on the researches of transportation network monitoring, modeling and control, autonomous driving safety test, etc. He has published over 100 papers on relevant journals, and serves as the managing editor of Journal of Intelligent Transportation Systems, and the associate editor of Transportation Research Part C.

..... Guest Speaker



Xinyong ZHAO

President of Hualu e-Cloud

Mr. ZHAO has presided over 4 key national programs, as well as 9 provincial and ministerial programs; participated in the compilation of 8 books; published over 30 papers; won 2 second prizes of the National Scientific and Technological Progress Award, 13 provincial and ministerial scientific and technological progress awards; and obtained 23 invention patents. He was elected as the national-level talent of the "New Century 10-million Talents" Program in 2009, the Top 100 Leading Science & Technology Talents of Beijing in 2016, and the Leading Talent of Z-park High-end Talents Recruitment Program in 2017. He also serves as the production safety expert in the Ministry of Public Security, Ministry of Science and Technology, and State-owned Assets Supervision and Administration Commission of the State Council.

..... Guest Speaker



Hongwei GE

Deputy Dean and Professor of School of Computer Science and Technology, Dalian University of Technology

Prof. GE is the doctoral supervisor. He mainly focuses on the researches of artificial intelligence, machine learning, deep learning, swarm intelligence, intelligent system, etc. In recent years, he undertook and participated in over 20 programs under the National 863 Project, National Sci-Tech Support Plan, and the National Natural Science Fund; won the second prize of 2015 MOE Natural Science Award; and published over 100 papers on nationally and internationally influential journals and conferences as IEEE Transactions on Cybernetics, IEEE Transactions on Evolutionary Computation, IEEE Transactions on SMCA, ICCV, etc.

AM July 26th

Forum

Machine Learning Forum

Meeting Room – 9

09:00–12:20

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Jun ZHU Director and Professor of the Basic Theory Center, Tsinghua AI Institute Junchi YAN Research Fellow of Department of Computer Science and Technology, Shanghai Jiao Tong University			
09:00-09:40	AI for Adaptive Experiment Design	Yisong YUE	Professor of California Institute of Technology
09:40-10:20	Deep Learning: From Theory to Algorithm	Liwei WANG	Deputy Dean and Professor of Department of Machine Intelligence, Peking University
10:20-11:00	Model-driven and Data-driven Methodologies in Machine Learning	Deyu MENG	Professor of Xi'an Jiaotong University
11:00-11:40	On the Underappreciated Role of Sparsity in Deep Variational Autoencoder Models	David Wipf	Chief Scientist of Amazon Shanghai Artificial Intelligence Lab
11:40-12:20	Dynamic Neural Networks	Gao HUANG	Assistant Professor of Tsinghua University

..... Forum Chair/Host



Jun ZHU

Director and Professor of the Basic Theory Center, Tsinghua AI Institute

Prof. Zhu mainly focuses on the basic theory of machine learning, efficient algorithms and applications. He has published over 100 papers at top-tier journals and conferences. He served as an adjunct professor in Carnegie Mellon University, an Associate Editor-in-Chief of IEEE TPAMI, the local Co-chair of ICML2014, and the Area Chair at ICML, NIPS, IJCAI, AACL conferences for over 20 times. He won the first-class prize of CCF Natural Science Award, the first-class prize of Beijing Teaching Achievements Award, the ICME Best Paper Award, as well as 7 championships in the NIPS and ViZDoom competitions.

..... Forum Chair/Host



Junchi YAN

Research Fellow of Department of Computer Science and Technology, Shanghai Jiao Tong University

Phd Advisor, Assistant to the MoE Key Lab of Artificial Intelligence, Program Director of SJTU ACM Class for AI. He has led a number of NSFC projects. His current main research interests include graph and temporal data learning, especially for combinatorial learning. He was once the Senior Research Staff Member with IBM Research China, and a Principal Scientist in cognitive computing. He has published over 60 CCF-A papers and more than 20 US invention patents, and has been recognized as the IBM Master Inventor in two consecutive terms. He serves CVPR Area Chair, CIKM Senior PC and the Guest Editor for IEEE TNNLS, Pattern Recognition, PRLetters.

..... Guest Speaker



Yisong YUE

Professor of California Institute of Technology

Prof. YUE was the research scientist at Disney Research, and the postdoctoral researcher in the Machine Learning Department and the iLab at Carnegie Mellon University. He mainly focuses on the practical theory of machine learning that pushes principled algorithm design towards real-world applications. His research results have been applied to information retrieval, recommender systems, text classification, learning from rich user interfaces, analyzing implicit human feedback, data-driven animation, behavior analysis, sports analytics, experiment design for science, protein engineering, program synthesis, learning-accelerated optimization, robotics, and adaptive planning & allocation problems.

..... Guest Speaker



Liwei WANG

Deputy Dean and Professor of Department of Machine Intelligence, Peking University

Prof. WANG is also an adjunct professor of Institute of interdisciplinary Information Science, Tsinghua University. He mainly focuses on the researches of machine learning theory; published over 100 papers on top-level journals and conferences. He also serves as the Associate Editor of TPAMI, the Area Chair of NeurIPS and ICML. He was the first Asian scholar elected as the AI's 10 to Watch.

..... Guest Speaker



Deyu MENG

Professor of Xi'an Jiaotong University

Prof. MENG is a doctoral supervisor, and the head of the Machine Learning Research Group of National Engineering Lab of Big Data Algorithm and Analytical Technology. He mainly focuses on the fundamental researches of machine learning, computer vision and artificial intelligence. He has published over 100 papers, including 36 IEEE Trans. regular papers, and 37 CCF A-class conference papers, with over 7,000 Google Scholar citations. He has won the first prize of Shaanxi Science and Technology Award, the Shaanxi Youth Science and Technology Award, and Shaanxi Excellent Doctoral Thesis Award. Currently, He also serves as the Editorial Board Member of TPAMI, FCS and Science China: Information Sciences.

..... Guest Speaker



David Wipf

Chief Scientist of Amazon Shanghai Artificial Intelligence Lab

Dr. Wipf once worked in MSRA. He mainly focuses on the researches of non-convex optimization, sparse/stru assessment, deep generative model, and deep network compression. He has won the 2012 IEEE Signal Processing Society Best Paper Award, the Biomag 2008 Award for Young Researchers, and the NIPS 2006 Distinguished Student's Paper Award. He also serves as the Editorial Board Member of Journal of Machine Learning Research, and the Aera Chair for ICML, CVPR, LCCV, LCLR, NIPS/NeurIPS, etc.

..... Guest Speaker



Gao HUANG

Assistant Professor of Tsinghua University

Prof. HUANG is an Assistant Professor and PhD supervisor in Tsinghua University. His research mainly focuses on architecture design and optimization of deep neural networks. He is the inventor of DenseNet, a popular deep model being widely used in both academia and industry. He has published about 40 academic papers on top-tier conferences and journals, with more than 14,000 citations on Google Scholar. He is a recipient of the CVPR Best Paper Award, SAIL Pioneer Award, Top 100 Most Influential Scientific Papers by China Authors, the First Prize of Natural Science Award and Excellent Young Scholar Award of Chinese Association for Artificial Intelligence.

PM July 26th

Forum

Post-pandemic Intelligent Manufacturing & Industrial Internet Application Forum

📍 Communication Hall

🕒 14:00–17:30

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair:

Peigen LI Academician of Chinese Academy of Engineering; President of Chinese Mechanical Engineering Societ

Bin LI Director of Intelligent Manufacturing Committee, CAAI

Professor of Huazhong University of Science and Technology

Host: Pei HUANG Deputy Director of CAAI Intelligent Manufacturing Committee; CEO of e-works

14:00-14:35	Data Driving--Quick Response	Peigen LI	Academician of Chinese Academy of Engineering President of Chinese Mechanical Engineering Societ
14:35-15:10	AI and Human-Robot Collaboration	Lihui WANG	CAE Fellow Professor of KTH Royal Institute of Technology CIRP/SME/ASME Fellow
15:10-15:45	AI--Practice and Observation of Intelligent Manufacturing	David Chen	IBM Vice President
15:45-16:20	A Manufacturing System Driven by Data Intelligence	Jie ZHANG	Dean and Professor of College of Mechanical Engineering, Donghua University
16:20-16:55	Smart Manufacturing: Openness and Resilience Perspectives	Andrew Kusiak	Professor of Department of Industrial and Systems Engineering, The University of Iowa Editor-in-Chief of Intelligent Manufacturing IISE Fellow
16:55-17:30	Case Share of Practices in Industrial Intelligence and Internet	Nan LI	Director of product with GETECH.cn

..... Honorary Chairman/Forum Chair/Guest Speaker



Peigen LI

Academician of Chinese Academy of Engineering
President of Chinese Mechanical Engineering Societ

..... Forum Chair



Bin LI

**Director of Intelligent Manufacturing Committee, CAAI
Professor of Huazhong University of Science and Technology**

Prof. LI is the Board Chairman of Wuhan Intelligent Equipment Industrial Institute Co., Ltd., the Executive Deputy Director of National Engineering Research Center for Manufacturing Equipment Digitization, the Executive Deputy Director of National Engineering Research Center for Numerical Control System, and the Vice President of Hubei Technological Trade Association. He mainly focuses on the researches of industrial machine vision technology, industrial big data technology, digital twin technology, intelligent manufacturing equipment and product line technology.

..... Guest Speaker



Lihui WANG

**CAE Fellow; Professor of KTH Royal Institute of Technology
CIRP/SME/ASME Fellow**

Prof. WANG mainly focuses on the researches of distributive machine processing technology planning, web-based real-time monitoring and control, intelligent and adaptive manufacturing system, information physics and cloud manufacturing system, human-robot collaborative assembly, etc. He also serves as the Editor-in-Chief of Robotics and Computer-Integrated Manufacturing, International Journal of Manufacturing Research, and Journal of Manufacturing Systems, as well as the chairman of North America Manufacturing Research Institute of the Society of Manufacturing Engineers, and the Sweden Production Association. He has published over 500 papers; and won the Best Paper Award for 5 times, and the NRC Award for 8 times.

..... Guest Speaker



David Chen

IBM Vice President

Mr. CHEN is the General Manager of the Department of Digital Sales & Industrial and Commercial Enterprise Business in the Greater China Area, and the member of Global Industry Institute. As the senior leading figure in enterprise's digital transformation, intelligent manufacturing, IoT and AI in the Greater China area, he is responsible for the development and implementation of enterprise strategy, sales and business development, merger, acquisition and integration. He has served as the CDO and General Manager of Electronic Industry with IBM Greater China Area, the Vice President of Chinasoft International, the Chief Data Architect of GEPS, and the Director of the Consulting Department, Shanghai Internet Economy Consultation Center. He also serves as the co-founder and Board Director of Wuhan North Optical & Electronic Technology Co., Ltd.

..... Guest Speaker



Jie ZHANG

Dean and Professor of College of Mechanical Engineering, Donghua University

Prof. ZHANG is the doctoral supervisor. She once served as the Deputy Director and Professor of Intelligent Manufacturing and Information Engineering Institute, School of Mechanical Engineering, Shanghai Jiao Tong University, and the Associate Professor of School of Mechanical Science and Engineering, Huazhong University of Science and Technology. She once studied in the Universite Lumiere-Lyon II, the University of California, Berkeley, and the University of Illinois at Urbana-Champaign as a senior visiting scholar.

..... Guest Speaker



Andrew Kusiak

**Professor of Department of Industrial and Systems Engineering, The University of Iowa
Editor-in-Chief of Intelligent Manufacturing
IISE Fellow**

Prof. Kusiak is the Director of the Intelligent Systems Laboratory, The University of Iowa, and the world-famous expert in intelligent manufacturing. He mainly focuses on the researches of the applications of AI and big data in intelligent manufacturing, product development, renewable energy, sustainable development and healthcare. He has published hundreds of papers on international journals, and multiple books; and worked for multiple international organizations, associations and conferences, as well as over 50 journals including IEEE Transactions as editorial roles.

..... Guest Speaker



Nan Li

Director of product with GETECH.cn

Mr. Li is the senior solution architect of GETECH. He has accumulated 6 years of experience in R&D of intelligent manufacturing technologies, and even longer experience in implementing operational excellence and digital transformation projects in manufacturing industry. Currently, he dedicates to the application, development and promotion of intelligent manufacturing and industrial internet in small and medium-sized manufacturers.

..... Host



Pei HUANG

**Deputy Director of CAAI Intelligent Manufacturing Committee
CEO of e-works**

Dr. HUANG is the member of the MIIT Expert Committee for Information and Communication Economy, and the Deputy Director of CAAI Intelligent Manufacturing Committee. With the 29-year management experience in intelligent manufacturing service industry, he has provided consultations for hundreds of enterprises, and won the second prize of the National Scientific and Technological Progress Award.

PM July 26th

Forum

Intelligent Interaction in the Interconnected Context Forum

📍 Meeting Room – 1

🕒 13:30–17:30

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Yu HU Co-founder and Rotating President of iFlyteck; CAAI Fellow

Houqiang LI Deputy Dean and Professor of School of Information Science and Technology, University of Science and Technology of China; Director of MOE-Microsoft Key Laboratory of Multimedia Computing and Communication

13:30-14:00	Towards Human-Centric Smart Interactions	Jianfei CAI	Professor of Monash University Head for the Data Science & AI Department
14:00-14:30	Deep Sequence-to-sequence Learning for Continuous Sign Language Recognition	Wengang ZHOU	Professor of University of Science and Technology of China Reardeed of National Natural Science Fund for Excellent Young Scholars
14:30-15:00	Status Quo and Challenges of Emotional Interaction Technology	Jianhua TAO	Deputy Director and Research Fellow of the National Key Lab of Pattern Recognition, CAS Institute of Automation Reardeed of the National Natural Science Fund for Distinguished Young Scholars
15:00-15:30	Study on Transfer Learning Based Task-oriented Conversational System	Wanxiang CHE	Professor of School of Computer Science and Technology Harbin Institute of Technology MOE Young Chang Jiang Scholar
15:30-16:00	Brain-computer Interface Technology for Clinical Application	Yuanqing LI	Dean and Professor of School of Automation Science and Engineering, South China University of Technology Reardeed of National Natural Science Fund for Distinguished Young Scholars IEEE Fellow
16:00-17:30	Panel: The Next Decade of Breakthroughs in Human-Computer Interaction		



Yu HU

..... Lecturer of AI Classroom/Forum Chair/Host

**Co-founder and Rotating President of iFlytek
CAAI Fellow**

Dr. HU is the Former Vice President of the CAAI Council, the Director of Consumer Strategic Committee of IFLYTEK , the expert enjoying special allowance of the State Council, the member of the MOST Strategic Advisory Committee for New Generation Artificial Intelligence, the chief expert of the National 863 Humanoid Intelligence Priority Project sponsored by MOST , the Executive Director of National Engineering Lab for Speech and Language Information Processing, the Director of the Application Planning Group of CAS AI Industry, University and Research Institution Innovation Alliance, the part-time professor and doctoral supervisor of University of Science and Technology of China; He has won the Second National Innovation Competition Award; and he dedicates to the researches of intelligent speech and core AI technology, commercialization and ecosystem construction of the AI industry.



Houqiang LI

..... Forum Chair/Host

Deputy Dean and Professor of School of Information Science and Technology, University of Science and Technology of China

Director of MOE-Microsoft Key Laboratory of Multimedia Computing and Communication

Prof. LI is the Changjiang Scholar Distinguished Professor, the Leading Scientist of Ten Thousand Talent Program of China, and the winner of the National Natural Science Funds for Distinguished Young Scholar. He mainly focuses on the researches of computer vision and pattern recognition, computer game and artificial intelligence, multimedia search, and video coding and communication. He has published over 200 papers; obtained over 60 patents; served as the TPC Co-Chair of VCIP 2010, and the Editorial Board Member of IEEE TCSVT and IEEE TMM; and won the second prize of National Award for Technological Invention Award, the second prize of National Natural Science Award, the first prize of Anhui Science and Technology Award, and the Excellent Ph.D Supervisor of Chinese Academy of Sciences (CAS) successively in 4 years. He will act as the General Co-Chair of IEEE ICME 2021.



Jianfei CAI

..... Guest Speaker

**Professor of Monash University
Head for the Data Science & AI Department**

Prof. CAI served as the full professor, the Deputy Director of Data Science & AI Research center (DSAIR), and the Head of Visual and Interactive Computing Division and Computer Communications Division in Nanyang Technological University (NTU). His major research interests include computer vision and multimedia. He has published more than 200 technical papers on international conferences and journals. He is a co-recipient of paper awards in ACCV, ICCM, IEEE ICIP and MMSP. He has served as the Associate Editor for IEEE T-IP, T-MM, T-CSVT and Visual Computer as well as serving as Area Chair for ICCV, ECCV, ACM Multimedia, ICME and ICIP. He was the Chair of IEEE CAS VSPC-TC. He was also the leading TPC Chair for IEEE ICME 2012 and the best paper award committee chair & co-chair for IEEE T-MM 2020 & 2019.



Wengang ZHOU

..... Guest Speaker

**Professor of University of Science and Technology of China
Reardeed of National Natural Science Fund for Excellent Young Scholars**

Prof. ZHOU is a doctoral supervisor. He mainly focuses on the researches of multimedia analysis & retrieval, and computer vision. He has published over 60 papers on ACM/IEEE Transactions and CCF Tier-A International Conferences, with over 4,000 Google Scholar citations. He was been selected into the Youth Elite Scientists Scholarship Program by China Association for Science and Technology, and the Youth Innovation Promotion Association of Chinese Academy of Sciences; and won the Excellent PhD Thesis Award of Chinese Academy of Sciences, and the ICIMCS 2012 Best Paper Award.

..... Guest Speaker



Jianhua TAO

Deputy Director and Research Fellow of the National Key Lab of Pattern Recognition, CAS Institute of Automation

Rewardee of the National Natural Science Fund for Distinguished Young Scholars

Dr. TAO is the director of the LIAMA, and the leading scientific and technological talent of the National 10,000 Talents Program. He mainly focuses on the researches of human-computer interaction, affective computing, pattern recognition, big data analysis, etc. He once presided over more than 20 national "863 Plan", the National Natural Science Fund and the National Key Research and Development Plan programs; and published over 300 papers on major national and international academic journals and conferences, as well as 2 academic books in English. He was awarded by multiple nationally and internationally influential academic conferences, and rewarded by Beijing Scientific and Technological Progress Award with second prize twice. He also serves as the Editor-in-Chief and the Editorial Board Member of multiple international journals, as well as the TPC Chair or member for multiple nationally and internationally influential academic conferences.

..... Guest Speaker



Wanxiang CHE

Professor of School of Computer Science and Technology, Harbin Institute of Technology

MOE Young Chang Jiang Scholar

Prof. CHE is the doctoral supervisor, the MOE Young Chang Jiang Scholar, the Young Long Jiang Scholar. He was nominated for the AAAI 2013 Best Paper Award. He led the research and development of language technology platform (LTP), which was shared by over 600 organizations, and authorized to Baidu, Tencent and Huawei. He has won the first place in CoNLL 2018 and 2019, and the first prize of 2016 Heilongjiang Scientific and Technological Progress Award. His Advanced Programming Language (Python) course was rewarded as the National Excellent Online Open Course.

..... Guest Speaker



Yuanqing LI

Dean and Professor of School of Automation Science and Engineering, South China University of Technology; Rewardee of National Natural Science Fund for Distinguished Young Scholars

IEEE Fellow

Prof. LI is the Director of Center for Computer Brain Interfaces and Brain Information Processing, the MOE Chang Jiang Scholar Distinguished Professor, and the candidate for the National Project for Millions of Talents. He has won the second prize of the National Natural Science Foundation Award, the first prize of MOE Natural Science Award, and the first prize of Guangdong Natural Science Award; and presided over multiple programs under the National Key Research and Development Plan, the National Natural Science Foundation, the MOST 863 Program, Guangdong Natural Science Foundation, and Guangdong Key Research and Development Plan. He mainly focuses on the researches of independent component analysis and blind source separation, sparse coding, machine learning, EGG and fMRI signal analysis, intracranial auditory and visual integration, brain-computer interface and clinical application.

PM July 26th

Forum

Big Data & Industry Prospect in the AI Context Forum

Meeting Room – 2

13:30–17:00

Time	Topics	Guest Speakers	Workplaces and Positions
<p>Forum Chair/Host: X. Sean Wang Professor of School of Computer Science & Technology, Fudan University; CCF Fellow Junping DU Director of Intelligent Service Committee, CAAI; Professor of the School of Computer Science, Beijing University of Posts and Telecommunications (BUPT); CAAI/CCF Fellow</p>			
13:30-14:00	True Computing of Big Data	Changjun JIANG	Chairman of CAAI Board of Supervisors Vice President and Professor of Tongji University CAAI Fellow
14:00-14:30	Some Enlightenment from AI of the New Era	Aoying ZHOU	Vice President of East China Normal University (ECNU) Director of "Intelligent+" Research Institute CCF Fellow
14:30-15:00	AI's impact on next generation big data processing technology	Yuanhao SUN	Founder and CEO of Transwarp
15:00-15:30	15 Years of Knowledge Graphs: Lessons and Challenges	Gerhard Weikum	Member of Academia Europaea; ACATECH Fellow ACM Fellow
15:30-16:00	DAS: Application and Integration of AI in Enterprise Cloud Native Database Systems	Feifei LI	Vice President of Alibaba Group ACM Distinguished Scientist
16:00-16:30	Data Science as A Vehicle for Changing University Education in New Digital Era	Sang Kyun Cha	Director of Big Data Institute; Professor of Seoul National University
16:30-17:00	Panel: AI and Future Data		

..... Forum Chair/Host



X. Sean Wang

**Professor of School of Computer Science & Technology, Fudan University
CCF Fellow**

Prof. WANG's research areas include big data analysis and systems. He's the PI of 20+ nationally funded research projects, including a national key research and development plan project and an NSFC key project. He 's published over 100 research papers, and won US NSF Career Award. He is currently serving as Editor-in-Chief of Springer DSE journal, and a member of the Steering Committees of IEEE ICDE Conference series and IEEE BigComp Conference series, and was the General Chair of IEEE ICDE 2012 and ACM CIKM 2014 as well as the Chair of the Steering Committee of WAIM Conference series.

..... Forum Chair/Host



Junping DU

Director of Intelligent Service Committee, CAAI; Professor of the School of Computer Science, Beijing University of Posts and Telecommunications (BUPT); CAAI/CCF Fellow

Prof. DU's a member of the Academic Committee of BUPT, and Chair of the Academic Committee of School of Computer Science, BUPT. Prof. DU's research areas include intelligent processing of multi-media tourism big data, and mining and search of social networks. She has been the PI for over 30 nationally and provincially funded scientific research projects, including a National Key Research and Development Project, an NSFC Key Project, and an NSFC Key International Cooperation Project. She's published 4 research monographs and more than 400 research papers. She's won the second class prize of National Technology Invention Award, the first class prize of MOE Technology Intervention Award, and the second class prize of Beijing Science and Technology Award.

..... Lecturer of AI Classroom/Guest Speaker



Changjun JIANG

Chairman of CAAI Board of Supervisors, Vice President and Professor of Tongji University CAAI Fellow

Prof. JIANG is the Former Vice President of the CAAI Council, the winner of the National Natural Science Fund for Distinguished Young Scholars, and the Director of the MOE Key Lab of Embedded System and Service Computing in Tongji University. He mainly focuses on the researches of network concurrent theory, network risk prevention and control, network computing environment and information service; works as the chief scientist of National Key Research and Development Program; presided over 30 programs, including the integrated and key programs of National Natural Science Fund of China, National High Technology Research and Development of China and international key science and technology research and development program; and won the second prize of the 2016 and 2013 National Scientific and Technological Progress Award, the second prize of 2010 National Technological Invention Award, the first prize of provincial and ministerial natural science, technological invention, scientific and technological progress awards, and the Second National Innovation Competition Award.

..... Guest Speaker



Aoying ZHOU

Vice President of East China Normal University (ECNU) Director of "Intelligent+" Research Institute CCF Fellow

Prof. ZHOU is the member of the 7th Discipline Review Group of the Academic Degree Committee of the State Council, the Vice President of Shanghai Computer Society, and the Associate Editor-in-Chief of Chinese Journal of Computer. He once obtained the National Science Fund for Distinguished Young Scholars supported by National Natural Science Foundation of China and the professorship appointment under Changjiang Scholars Program of Ministry of Education. He mainly focuses on the researches of database, data management, digital transformation and data-driven applications as Education Technology (EduTech) and Logistics Technology (LogTech).

..... Guest Speaker



Yuanhao SUN

Founder and CEO of Transwarp

Mr. SUN is the Director of China Artificial Intelligence Industry Development Alliance, and the Deputy Director of Transwarp Big Data Joint Lab. He presided over 9 municipal key scientific and technological programs of Shanghai; obtained 13 national and international patents, as well as honors and awards, including Zhizheng Cup Shanghai Innovation Award for Scientific and Technological Entrepreneurs, Top 10 Outstanding Young Entrepreneurs of Shanghai, China Big Data Leaders, China Data Heroes, Outstanding Contributors in Internet Technology Application, Shanghai Smart City Construction Leaders, Shanghai Excellent Academic and Technological Leaders and Shanghai Top Talents; and made great achievements and accumulated rich experience in big data and AI applications.

..... Guest Speaker



Gerhard Weikum

Member of Academia Europaea; ACATECH Fellow; ACM Fellow

Dr. Weikum is the Director of Max Planck Institute for Informatics, and a part-time professor of Universität des Saarlandes. He is one of the creators of YAGO knowledge base. He mainly focuses on the researches of knowledge acquisition representation, distributive information system, database performance optimization and autonomous computing, information retrieval and extraction. He has co-authored a comprehensive textbook; and won the VLDB Test-of-Time Award 2002, the ACM SIGMOD Contributions Award in 2011, the Google Focused Research Award in 2011, the ERC Synergy Grant in 2014, the ACM SIGMOD Edgar F. Codd Innovations Award in 2016, and the WWW Test-of-Time Award in 2018.

..... Guest Speaker



Feifei Li

**Vice President of Alibaba Group
ACM Distinguished Scientist**

Dr. Li is the President of the Database Products Business Unit of Alibaba Cloud Intelligence, and the Director of the Database and Storage Labo of Damo Academy. He has won multiple awards from NSF, ACM, IEEE, Visa, Google, HP, Microsoft, IBM, etc. He is a recipient of the ACM SoCC 2019 Best Paper Award (runner-up), IEEE ICDE 2014 10 Years Most Influential Paper Award, ACM SIGMOD 2016 Best Paper Award, ACM SIGMOD 2015 Best System Demonstration Award, IEEE ICDE 2004 Best Paper Award. He has been an associate editor, PC co-chairs, and core committee members for many prestigious journals and conferences, and has led the R&D efforts of cloud native database systems and products at Alibaba.

..... Guest Speaker



Sang Kyun Cha

Director of Big Data Institute; Professor of Seoul National University

Professor Sang Kyun Cha has been the founding dean of the Graduate School of Data Science of Seoul National University since February of 2020. He led the effort of establishing this new graduate school to help transform Korea's leading higher education institution in the age of data-driven innovation and AI since he took the role of founding director of SNU Big Data Institute in April of 2014. Before taking this transformative role at the university, Prof. Cha was an innovator and entrepreneur who founded 'Transact In Memory, Inc.' in Silicon Valley in early 2000's based on his research on in-memory data management. After SAP AG's acquisition of the company in late 2005, he led SAP's secret research toward SAP HANA and took the role of one of two co-founding chief architects of SAP HANA until early 2014 when his role at SAP was more or less done and the industry shifted toward the in-memory paradigm triggered by SAP HANA.

PM July 26th

Forum

Robotic Environment Perception & Cognition Forum

Meeting Room – 3

13:30–17:30

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Qinghua HU

Deputy Director of Granular Computing & Knowledge Discovery Committee, CAAI; Deputy Dean of College of Intelligence and Computing; Dean and Professor of College of Artificial Intelligence, Tianjin University; Distinguished Young Scholar of the National Science Fund

Zhiyong LI Executive Deputy Dean of School of Robotics

Distinguished Professor of “Yue Lu Scholars” Program, Hunan University

13:30-14:10	Some Issues on Multi-robot Cooperative Perception and Control	Yaonan WANG	Supervisor of CAAI Board of Supervisors Academician of Chinese Academy of Engineering Professor of Hunan University
14:10-14:50	Bio-inspired Intelligent Sensing Model and Transfer Learning	Xin XU	Director of Department of Intelligence Science and Technology, College of Intelligence Science, National University of Defense Technology Recipient of National Natural Science Funds for Distinguished Young Scholars
14:50-15:30	Cloud Robot: The Killer Use Case for 5G	Bill Huang	Founder, Board Chairman and CEO of CloudMinds Inc.
15:30-16:10	Relocalisation with retrieval and correspondence networks	Victor Adrian Prisacariu	Associate Professor in Information Engineering with the Department of Engineering Science, University of Oxford
16:10-16:50	Open Cloud Robot Platform for Object Manipulation	Ping TAN	Director of Alibaba AI Labs
16:50-17:30	Online Robotic Visual Perception	Yang CONG	Professor of National Key Robotics Lab, Shenyang Institute of Automation, Chinese Academy of Sciences Reardeed of National Natural Science Fund for Excellent Young Scholars

..... Forum Chair/Host



Qinghua HU

Deputy Director of Granular Computing & Knowledge Discovery Committee, CAAI
Deputy Dean of College of Intelligence and Computing
Dean and Professor of College of Artificial Intelligence, Tianjin University
Distinguished Young Scholar of the National Science Fund

Prof. HU is the Director of Tianjin Key Lab of Machine Learning, the member of CAAI Council, and the Editor of IEEE Transactions on Fuzzy Systems, ACTA AUTOMATICA SINICA, CAAI Transactions on Intelligent Systems, and Journal of Control and Decision. He was once supported by different programs under the National Natural Science Fund for Excellent Young Scholars, the National Natural Science Fund for Distinguished Young Scholars, Key Program of National Science Foundation of China, and National Key Research and Development Project for his researches in machine learning and data mining. He mainly focuses on low-mass, high-dimension and multi-modal data modeling and application. Up to now, he has obtained over 30 patents, published over 200 papers which were quoted for over 10,000 times, and won the first prize of the Provincial Natural Science Award.

..... Forum Chair/Host



Zhiyong LI

**Executive Deputy Dean of School of Robotics
Distinguished Professor of “Yue Lu Scholars” Program, Hunan University**

Prof. LI is the academic leader of artificial intelligence researches in higher education institutions of Hunan, and the Executive Vice President of Hunan Robotics Technology Education Association. He mainly focuses on the teaching and research in visual perception and autonomous driving, machine learning and big data. He has presided over the “Intelligent Robot” Program of National Key Research and Development Project, the key research program of “Visual and Auditory Perception Computing” funded by the National Natural Science Foundation of China; and won the first prize of Hunan Teaching Achievements Award, the second prize of Hunan Technological Invention Award, and the national championship of “Future Challenge” Intelligent Vehicle Competition.

..... Lecturer of AI Classroom/Guest Speaker



Yaonan WANG

**Supervisor of CAAI Board of Supervisors
Academician of Chinese Academy of Engineering
Professor of Hunan University**

Prof. WANG is an expert in robotics and intelligent control, and the Director of the National Engineering Lab for Visual Perception and Control Technology of Robots, Hunan University. He has won 1 second prize of National Technological Invention Award, 4 second prizes of National Scientific and Technological Progress Award, 11 first prizes of provincial and ministerial awards; obtained over 70 national invention patents, and honorary titles as the “National Outstanding Teachers of Higher Education Institutions,” the “National May 1 Labor Medal,” “National Advanced Worker,” and the Second National Innovation Competition Award. He was selected as a talent to the National Talents Project. Now he also works in the Department of Energy and Transportation, Science and Technology Commission, Ministry of Education, and is the CCA/CCF Fellow.

..... Guest Speaker



Xin XU

**Director of Department of Intelligence Science and Technology, College of Intelligence Science, National University of Defense Technology
Recipient of National Natural Science Funds for Distinguished Young Scholars**

Prof. XU is the member of CAAI Council. He mainly focuses on the researches of machine learning and autonomous control of robots and intelligent unmanned system. He received one second-class prize of National Natural Science Award, 2 first-class prizes of Hunan Natural Science Award, the second-class prize of Defense Technology Progress Award, and the first-class prize of Hunan Excellent Natural Science Papers. The team jointly led by him and other two professors received the 2019 Hunan Scientific and Technological Innovation Team Award. He was the PI of more than 20 national, provincial and ministerial research projects, including 2 key National Natural Science Foundation programs. He also serves as the Associate Chief-Editor of CAAI Transactions on Intelligence Technology, and the Associate Editor of Information Sciences, IEEE Transactions on SMC: Systems, Acta Automatica Sinica, etc.

..... Guest Speaker



Bill Huang

Founder, Board Chairman and CEO of CloudMinds Inc.

Mr. Huang once served as the Director of China Mobile Group Design Institute Co., Ltd., the Senior Vice President and CTO of UTStarcom. He once proposed the soft switch theory of “network is exchange” and the “cloud intelligent robot” architecture, and initiated the International Softswitch Consortium. He has developed the first operator-level streaming switch and IPTV system; led the technological innovation, R&D of China Mobile Group Design Institute Co., Ltd.; proposed the strategic vision of the next-generation 3 major infrastructures of mobile internet, application and terminal; promoted the TD-LTE as the international mainstream 4G standard; founded the Chinese industrial chain of Android system; and took the responsibility of building the “Big Cloud” cloud computing platform for China Mobile.

..... Guest Speaker



Victor Adrian Prisacariu

Associate Professor in Information Engineering with the Department of Engineering Science, University of Oxford

Prof. Prisacariu is the co-leader of the Active Vision Lab, and the Chief Scientist of Niantic, Inc. He mainly focuses on the computer vision methods for real-time (semantic) AR on mobile and wearable platforms; and also takes an interest in other fields as computer vision, machine learning, data quantization, one shot learning and network architecture search. He dedicates to the computational vision, with an emphasis on 3D reconstruction and motion analysis for applications in location and mapping, surveillance, wearable and assistive computing, augmented reality, navigation, and teleoperation.

..... Guest Speaker



Ping TAN

Director of Alibaba AI Labs

Dr. TAN is a tenured associate professor of Simon Fraser University (SFU). His research mainly focuses on computer vision, especially 3D vision and applications in computer graphics and robotics. He served as an associate editor for top computer vision journals including TPAMI and IJCV, and an aera chair of top conferences as CVPR, SIGGRAPH, and IROS.

..... Guest Speaker



Yang CONG

Professor of National Key Robotics Lab, Shenyang Institute of Automation, Chinese Academy of Sciences

Rewardee of National Natural Science Fund for Excellent Young Scholars

Dr. CONG was selected for the "Liaoning Key Talent Project" . He is now the member of Liaoning Association of Artificial Intelligence. He once studied in the University of Rochester as a visiting scholar, and served for the National University of Singapore and the Nanyang Technological University. He has presided over multiple National Key Research and Development Program, key and general National Natural Science Fund programs, and CAS programs. He won the second prize of Liaoning Scientific and Technological Progress Award, the special prize and the second prize of Liaoning Natural Science Achievements Award; published over 60 papers on national and international journals and conferences, and a Springer monograph; and applied for 6 national invention patents and 7 software copyrights.

PM July 26th

Forum

Pattern Recognition Frontier Forum

Meeting Room – 10

13:30–17:15

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Zhouchen LIN

Professor of Peking University; Distinguished Young Scholar of the National Science Fund; IEEE/IAPR Fellow

Bowen ZHOU Chair of JD Technology Commit; teePresident of JD Cloud & AI; IEEE Fellow

13:30-14:15	Application of Pre-trained Model in Multi-lingual and Multi-modal Tasks	Ming ZHOU	Assistant Managing Director of MRSA
14:15-15:00	Trustable AI for Liveable City	Dacheng TAO	Professor of the University of Sydney Fellow of the Australian Academy of Science Foreign Member of the Academia Europaea、AAAS/ACM/IAPR/IEEE Fellow
15:00-15:45	The Development and Application of Transfer-learning Based Visual Intelligence	Shengmei SHEN	Chief Scientist of Pensees Technology, Managing Director of Pensees Research Institute
15:45-16:30	AI Art	Jiancheng LV	Dean of College of Computer Science and College of Software Engineering, Sichuan University Reardeed of the National Natural Science Fund for Distinguished Young Scholars
16:30-17:15	Ideas on Compressive Sensing of Data Prediction	Guangcan LIU	Professor of Nanjing University of Information Science and Technology

..... Forum Chair/Host



Zhouchen LIN

**Professor of Peking University, Distinguished Young Scholar of the National Science Fund
IEEE/IAPR Fellow**

Professor Zhouchen LIN has made great contributions to areas including machine learning, computer vision, and image processing, especially on the theories, modeling, and optimization algorithms for sparse and low-rank models, the theories and technologies of super-resolution, facial expression recognition, and the theories and algorithms of deep learning.

..... Forum Chair/Host



Bowen ZHOU

**Chair of JD Technology Commit
teePresident of JD Cloud & AI
IEEE Fellow**

As the Head of JD Exploration Labs Dr. ZHOU takes the responsibilities of boosting the strategy, innovation, research, product/solution and commercialization of JD technologies and services. He once worked as the Director of the AI Foundations Lab at IBM Research in New York. As the Chief Scientist of IBM Watson and the Distinguished Engineer of IBM, he has published more than 100 papers on top-level international conferences and first-class journals. He once worked as the member of the IEEE Speech and Language Technical Committee, the Associate Editor of IEEE Transactions, and the chair on multiple top-level academic conferences as ACL, ICASSP and NAACL. He has over 10 years of experience in research and management of natural language understanding, machine learning, and artificial intelligence.

..... Guest Speaker



Ming ZHOU

Assistant Managing Director of MRSA

Dr. ZHOU is the Past President of the Association for Computational Linguistics, the doctoral supervisor in multiple universities in China, and the winner of the Capital Labor Medal. He has won the 2010 Wall Street Journal Asia Innovation Award, the 2012 Microsoft CEO Ability Award, and the 2019 World Internet Conference Award for Leading Science and Technology. He developed the China's first Chinese-Japanese machine translation system and the Japan's famous Chinese-Japanese machine translation product. He has been leading the NLP research in the Microsoft Research Asia. He co-authored the technical monographs as Machine Learning and Intelligent Question Answering. He is one of the major organizers of CCF-NLPCC and Language and Intelligence Forum and the founder of the Asia Chapter of ACL.

..... Guest Speaker



Dacheng TAO

**Professor of the University of Sydney; Fellow of the Australian Academy of Science
Foreign Member of the Academia Europaea; AAAS/ACM/IAPR/IEEE Fellow**

His research interests spread across subareas in artificial intelligence (AI), including computer vision, data science, deep learning, image processing, machine learning, medical informatics, and video surveillance. His research results have expounded in one monograph and 200+ publications at leading journals and conferences, with several best paper awards. He received the 2015 Australian Museum Scopus-Eureka Prize and the UTS Vice-Chancellor's Medal for Exceptional Research, and the 2018 IEEE ICDM Research Contributions Award.

..... Guest Speaker



Shengmei SHEN

Chief Scientist of Pensees Technology; Managing Director of Pensees Research Institute

Ms. Shen is a well-known Chinese female scientist and internationally famed scholar in computer vision and deep learning. She once worked as the Deputy Director of Panasonic Research Lab in Singapore; obtained over 30 championships in international AI competitions; and won over 300 patents. She boasts the research and engineering experience of full stack algorithm in Computer Vision, covering AI-based Intelligent Sensing, Visual Perception and View Processing, as well as V-SLAM, Augmented Reality, Intelligent Control, and Voiceprint Recognition. She was rewarded with the Panasonic Special Award for Outstanding Technology and Leading Figures; acted as the chief editor of the ISO and IEC standards; and led the formulation of multiple international standards for audio and video.

..... Guest Speaker



Jiancheng LV

**Dean of College of Computer Science and College of Software Engineering, Sichuan University
Reardeed of the National Natural Science Fund for Distinguished Young Scholars**

Prof. LV mainly focuses on the researches of basic theories of neural network, as well as application to the natural language processing, industrial intelligence, smart medicine, and smart cultural and creative industries. He once presided over the National Natural Science Fund for Distinguished Young Scholars program and key program, and national key research and development program; won the second prize of the National Natural Science Award, the first prize of MOE Natural Science Award, and the first prize of Sichuan Scientific and Technological Progress Award; published his research achievements on journals as IEEE TNN, IEEE TFS, IEEE TSMC, IEEE TNNLS, IEEE TEC, IEEE TSP, IEEE TCYB, IEEE TETCI and ACM TALLIP, as well as on international conferences as ICML, ACL, CVPR, AACL and IJCAI; served as the Editorial Board Member of IEEE TNNLS; and published the English monograph—Subspace Learning of Neural Networks.

..... Guest Speaker



Guangcan LIU

Professor of Nanjing University of Information Science and Technology

Prof. LIU is the doctoral supervisor. He mainly focuses on the researches of machine learning and computer vision, as well as the extensive studies on theory and methodology of low-rank learning. He has published over 70 papers on national and international journals; ranked on the list of ESI Most Cited Scholars; and won the National Natural Science Fund for Excellent Young Scholars, Jiangsu Provincial Fund for Distinguished Young Scholars, the first prize of Jiangsu Natural Science Award for Higher Education Institutions. He also serves as the Senior PC Member of CCF A conferences as AACL and IJCAI, as well as the Editorial Board Member of SCI journal as Neurocomputing.

AI & 5G Forum

Meeting Room – 11

13:30–17:30

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Ye Ouyang CTO & Senior Vice President, AsiaInfo Technologies Hua WU Chair of Baidu Technical Committee			
13:30-14:10	Fusion of 5G and AI	Junlan FENG	Chief Scientist of China Mobile Vice President of Artificial Intelligence Industry Alliance
14:10-14:50	AI - enabled Intelligent Networks	Feng WANG	Director of AI R&D Center, China Academy of Telecommunication Research
14:50-15:30	From Social Distancing to Virtual-Real Intimacy	Baoquan CHEN	Boya Endowed Professor of Peking University; IEEE/CCF Fellow
15:30-16:10	Infuse Consumer Behavior Theory into AI	Mandy Hu	Associate Professor of The Chinese University of Hong Kong Director of Center for Consumer Insights
16:10-16:50	Large-scale Application of Intelligent Digital Content Generation	Jun HUAN	Deputy Director of CAAI Member Service Working Committee CEO and Chief Scientist of AI Fashion Styles
16:50-17:30	Full Duplex Voice Interaction in 5G Era	Lei JIA	Chief Architect of Baidu Voice

..... Forum Chair/Host



Ye Ouyang

CTO & Senior Vice President, AsiaInfo Technologies

Dr. Ouyang is responsible for the research, development, and innovation of AsiaInfo’s products and technologies. Prior to AsiaInfo, he has been a Verizon Fellow and was Senior Manager of Verizon Modeling & AI System in Verizon, leading a global team for the interdisciplinary R&D across mobile communications, AI, and data science. He has over 15 years experience of R&D and management of large R&D organizations. He received many awards in industry and academia, some latest including TMForum Future Digital Leader Award, Asian American Engineer of the Year, Best Paper Award in IEEE International Conference on Big Data etc. He authored 30+ academic papers, 40+ patents, 10+ standards, and 5 books.

..... Forum Chair/Host



Hua WU

Chair of Baidu Technical Committee

Dr. WU mainly focuses on the researches of natural language processing, knowledge graph, etc. She once acted as the Chair of TPC, ACL 2014, making her the first ACL TPC Chair from Chinese companies; and won the honors and titles, including the second prize of the National Scientific and Technological Progress Award, “Distinguished Female AI Scholar,” “Distinguished Engineer,” and “Young Scholar of Beijing.”

..... Guest Speaker



Junlan FENG

**Chief Scientist of China Mobile
 Vice President of Artificial Intelligence Industry Alliance**

Dr. FENG is the Board Chairman of Linux Foundation Networking, and the General Manager of China Mobile Artificial Intelligence & Smart Operation Center. She has led multiple national- and corporation-level key programs in AI and 5G, as well as the platform research and development; published over 80 papers on international academic conferences, magazines and journals; co-edited a book; won over 50 American and international patents, and over 20 national and international R&D awards; and applied for 36 national and international patents.

..... Guest Speaker



Feng WANG

Director of AI R&D Center, China Academy of Telecommunication Research

Dr. WANG is the head of the Server Work Group of Open Data Center Committee (ODCC), and the high-end leading talent of Zhongguancun Science Park. He once worked for IBM Research China as a senior research fellow. He has been dedicating to the research and development of key technologies and innovative products in the emerging DICT field, including cloud computing, software definition, artificial intelligence, etc.

..... Guest Speaker



Baoquan CHEN

Boya Endowed Professor of Peking University; IEEE/CCF Fellow

Prof. CHEN is the Executive Director of the Center on Frontiers of Computing Studies, Peking University. He mainly focuses on the research of computer graphics and data visualization. He once served as the chair of IEEE Vis 2005 and ACM SIGGRAPH Asia 2014; won the NSF CAREER Award in 2003 and ChinaGraph'2014; and worked as the Chief Scientist of National 973 Project "Urban Big Data Computing Theory and Methods," and the Chief Scientist of Advanced Innovation Center for Future Visual Entertainment, Beijing Film Academy.

..... Guest Speaker



Mandy Hu

**Associate Professor of The Chinese University of Hong Kong;
 Director of Center for Consumer Insights**

Prof. HU won the Best Paper Award on the Society for Marketing Advance Doctoral Thesis Competition. She mainly focuses on the application of cutting-edge quantitative model to data analysis and mining, in order to explore and interpret the consumer's behaviors in TMT, automobile, e-commerce and FinTech fields, especially the function and impact of social network, word-of-mouth effect, and interpersonal interaction in marketing activities. Her research results were published on the international leading marketing journals as Marketing Science, Management Science, etc.

..... Guest Speaker



Jun HUAN

**Deputy Director of CAAI Member Service Working Committee
CEO and Chief Scientist of AI Fashion Styles**

Dr. HUAN was the Director of Baidu Big Data Laboratory. Before coming back to China, he was the tenured Saphr professor, and the doctoral supervisor with the Department of Electrical Engineering and Computer Science, University of Kansas; the Director of Big Data, U.S. National Science Foundation; as well as the chief research fellow of multiple national science foundations, and big data, information and intelligent system program of National Institute of Health. He once served as the TPC chair of IEEE BIBM'15, the chair of ACM KDD'18 Workshop, and the TPC chair of IEEE Big Data 2019. He won the NSF CAREER Award in 2009.

..... Guest Speaker



Lei JIA

Chief Architect of Baidu Voice

Mr. JIA realized a series of breakthroughs in core technologies of speech recognition and speech synthesis, and presided over the research and development of Xiaodu far-field speech interaction system, Xiaodu on-board voice interaction, Baidu Honghu sound chip, etc. He has won the second prize of Beijing Scientific and Technological Progress Award, the title of National Model Worker, the first prize of CIE Science and Technology Award, and the silver award of Chinese Patents.

PM July 26th

Forum

Forum on Natural Language Processing

Meeting Room – 12

18:30–21:50

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Yang LIU Director and Professor of Tsinghua Artificial Intelligence Institute Winner of the National Science Fund for Distinguished Young Scholars Forum Chair: Yue ZHANG Distinguished Research Fellow of Westlake University			
18:30-19:10	R&D of Target-driven Machine Translation Systems	Chengqing ZONG	Research fellow of Institute of Automation, Chinese Academy of Sciences; CAAI Fellow
19:10-19:50	Improving NLP Model Performance after Deployment	Bing LIU	WICT Peking University and University of Illinois at Chicago ACM/AAAI/IEEE Fellow
19:50-20:30	Natural Language Processing: Past, Current, and Future	Min ZHANG	Deputy Dean and Distinguished Professor of School of Computer Science & Technology Suzhou University Rearwardee of the National Natural Science Fund for Distinguished Young Scholars
20:30-21:10	Multimodal Human-Computer Dialogue and Interaction	Xiaodong HE	Vice President of JD.COM Executive Director of JD AI Research IEEE/CAAI Fellow
21:10-21:50	Lessons from the Long Tail: Methods for NLP in the Next 1,000 Languages	Graham Neubig	Associate Professor of the Language Technologies Institute, Carnegie Mellon University

..... Forum Chair/Host



Yang LIU

Director and Professor of Tsinghua Artificial Intelligence Institute; Winner of the National Science Fund for Distinguished Young Scholars

Prof. LIU mainly focuses on the researches of natural language processing and machine translation. He has published over 80 papers on internationally influential journals and conferences in NLP and AI; won the Outstanding ACL2017 Paper Award, and the ACL2006 Award for excellent Asian NLP papers; and obtained the second prize of the National Scientific and Technological Progress Award, the first prize of CIE Scientific and Technological Progress Award, the first prize of Qian Wei-chang Youth Innovation Award of Chinese Information Processing Society of China, and the second prize of Beijing Science and Technology Award. He once served as the Executive Member of Secretary-general of Asia-Pacific Chapter, The Association for Computational Linguistics, the Editorial Board Member of Computational Linguistics, and the Associate Editor of ACM TALLIP.

..... Forum Chair/Host



Yue ZHANG

Distinguished Research Fellow of Westlake University

Dr. ZHANG mainly focuses on the researches on fundamental natural language processing and application. His research achievements include structured prediction algorithm of left-to-right text processing, joint model for multi-task learning, natural language processing, studies of human knowledge, as well as the relationship between brain structure and natural language processing. He has published over 30 papers on international journals, and over 100 papers on CCF A and B conferences, with over 4,800 Google Scholar citations, H-index of 35; won the COLING 2018 and IALP2017 Best Paper Awards; and served as the area chair on top-level national and international conferences as ACL, COLING, EMNLP and NAACL. He also serves as Action Editor of ACL, and Associate Editor of ACM TALLIP and IEEE TBD.

..... Guest Speaker

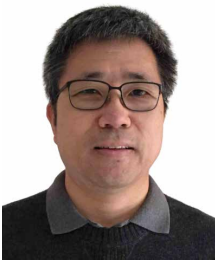


Chengqing ZONG

Research fellow of Institute of Automation, Chinese Academy of Sciences; CAAI Fellow

Dr. ZONG is the member of International Committee on Computational Linguistics, and the Chair of Asian Federation of National Language Processing. He mainly focuses on the researches of natural language processing, machine translation, text and data mining. He once presided over 10 national programs; served as the Chief Scientist of national key research and development program, the Associate Editor of ACM TALLIP and Automation Journal, and the TPC Chair of international first-class academic conferences as ACL 2015 and COLING 2020; and won the second prize of National Scientific and Technological Progress Award, Qian Weichang Chinese Information Processing Science & Technology Award, the Excellent Teachers of Beijing, and the Excellent Supervisors of CAS. He will serve as the Chair of ACL 2021.

..... Guest Speaker



Bing LIU

**WICT Peking University and University of Illinois at Chicago
ACM/AAAI/IEEE Fellow**

Prof. LIU mainly focuses on the researches of lifelong machine learning, sentiment analysis, data mining, machine learning and natural language processing. He has published a large number of papers on top-level conferences and journals, as well as 4 monographs; won the KDD Test-of-Time award, WSDM Test-of-Time award, WSDM Test-of-Time honorary award, and ACM SIGKDD innovation award; served as the ACM SIGKDD chair for 5 years in a row, the TPC chairs for multiple top-level data mining conferences as KDD, ICDM, CIKM, WSDM, SDM and PAKDD, the area chairs for multiple conferences on natural language processing, artificial intelligence, network and data mining, as well as the Associate Editor for multiple top-level journals as TKDE, TWEB, DMKD, TKDD, etc.

..... Guest Speaker



Min ZHANG

**Deputy Dean and Distinguished Professor of School of Computer Science & Technology
Suzhou University**

Rewardee of the National Natural Science Fund for Distinguished Young Scholarsw

Prof. ZHANG is the Director of Human Language Technology Institute, Suzhou University, the “Mass Entrepreneurship and Innovation Talent” of Jiangsu, and the Chief Scientist of “Mass Entrepreneurship and Innovation Team Program” of Jiangsu. He focuses on the researches of natural language processing and machine translation for long; presided over National Natural Science Fund for Distinguished Young Scholars program, the key NSFC programs, the MOST key R&D programs, and industrial programs; won 3 ministerial scientific and technological progress awards; published over 100 papers on CCF A/B conferences and journals, and 2 Springer monographs; and edited 16 English works. He also serves as the Editorial Board Member of IEEE/ACM T-ASLP, SCIENTIA SINICA Informationis and ACTA AUTOMATICA SINICA, the chair of SIGHAN/ACL, and the member of PACLIC.

..... Guest Speaker



Xiaodong HE

**Vice President of JD.COM
Executive Director of JD AI Research
IEEE/CAAI Fellow**

Dr. He is also Affiliate Professor at University of Washington, Seattle. Before Joining JD.COM, he was Principal Researcher and Research Manager of Deep Learning of Technology Center (DLTC). His research interests are in natural language processing and vision-and-language multimodal Intelligence. His work, including DSSM, HAN, DistMult, SAN, Bottom-Up Attention, has been widely recognized by the community, received more than 19,000 citations according to Google Scholar.

..... Guest Speaker



Graham Neubig

Associate Professor of the Language Technologies Institute, Carnegie Mellon University

Prof. Neubig mainly focuses on the researches of natural language processing, specifically multi-lingual models that work in many different languages, and natural language interfaces that allow humans to communicate with computers in their own language. He has published multiple papers on journals and conferences in natural language processing, machine learning, and speech; and won multiple awards on EMNLP 2016, EACL 2017, and NAACL 2019.

AM July 26th

Forum

Intelligent Autonomous Vehicles Forum

Meeting Room – 12

18:30–21:30

Time	Topics	Guest Speakers	Workplaces and Positions
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Forum Chair/Host:

Diange YANG Dean and Professor of School of Vehicle and Mobility Tsinghua University
Leading talent of the National 10000 Talents Program; CSAE Fellow

Dongpu CAO Canada Research Chair in Driver Cognition and Automated Driving
Director of Cognitive Autonomous Driving Lab and Associate Professor of University of Waterloo

18:30-19:00	Mixed Reinforcement Learning and its Application on Autonomous Vehicles	Shengbo LI	Tenured Associate Professor of School of Vehicle and Mobility, Tsinghua University
19:00-19:30	Tesla FSD Disrupts the Industry with AI Chip	Kai YU	CEO & Founder of Horizon Robotics
19:30-20:00	Technical Challenges of Last-mile Autonomous Delivery	Gang WANG	Senior Director of Autonomous Driving Lab, Alibaba Damo Academy Distinguished Scientist of Alibaba AI Labs
20:00-20:30	Momenta FlyWheel L4: Redefine the approach to Scalable L4	Xudong CAO	CEO of Momenta
20:30-21:00	Evaluation methods toward safe AI autonomy	Ding ZHAO	Director of AI Safety Lab Assistant Professor of Carnegie Mellon University
21:00-21:30	Panel: The Industrialization of Autonomous Driving		

..... Forum Chair/Host



Diange YANG

Dean and Professor of School of Vehicle and Mobility Tsinghua University
Leading talent of the National 10000 Talents Program
CSAE Fellow

Prof. YANG mainly focuses on the researches of intelligent vehicles and auto-driving technology. He has won 3 times of National Award for Technological Invention; presided over 3 National Natural Sciences Foundation programs, 1 National Key Research and Development Project during the 13th Five-year Plan Period, 1 international cooperation program of National Key Research and Development Project, 1 key program for Scientific and Technological Winter Olympics of Beijing, and 1 key program of Beijing Science and Technology Project; led 8 cooperation programs with famous Chinese and foreign enterprises, as the Director of Tsinghua-Toyota Auto-driving AI Joint Research Center, including Toyota, Mercedes-Benz, SAIC and BAIC Motor; published 176 papers; and obtained 104 invention patents.

..... Forum Chair/Host



Dongpu CAO

**Canada Research Chair in Driver Cognition and Automated Driving
Director of Cognitive Autonomous Driving Lab and Associate Professor of University of Waterloo**

Prof. CAO was a visiting professor of University of Stuttgart and UCL Institute of Cognitive Neuroscience. He has published over 100 journal papers in the field of automated driving, and received the 2012 SAE Arch T. Colwell Merit Award, 2020 IEEE VTS Best Vehicular Electronics Paper Award, IEEE VTS Distinguished Lecturer, and 3 Best Conference Paper Awards. He serves as the Deputy Editor-in-Chief of IET Intelligent Transport Systems Journal and an Associate Editor for multiple international journals, and is a chair/co-chair of multiple technical committees of IEEE and CAA. Prof. Cao supervises over 40 students, with over 60 students graduated.

..... Guest Speaker



Shengbo LI

Tenured Associate Professor of School of Vehicle and Mobility, Tsinghua University

Prof. LI was rewarded with the Beijing Municipal Natural Science Fund for Distinguished Young Scholars, the Chang Jiang Young Scholars, and the National Natural Science Fund for Excellent Young Scholars; the second prize of National Technological Invention Award, the second prize of National Scientific and Technological Progress Award, the Young and Mid-aged Innovation Leaders Award by the Ministry of Science and Technology, the Young and Mid-aged Scientific and Technological Innovation Leaders in Transportation Industry, and the Excellent Young Science and Technology Talents in Automotive Industry; as well as 6 Best Paper Awards on domestic and overseas conferences. He published over 100 SCI/EI papers, which were quoted for over 6,300 times. He mainly focuses on the researches of intelligent vehicle, autonomous driving, reinforcement learning, optimum control and swarm intelligence; and works as the part-time member of the Global Council of IEEE ITS Society, and the Associate Editor of IEEE ITS/IEEE ITSM journal.

..... Guest Speaker



Kai YU

CEO & Founder of Horizon Robotics

Dr. YU is an internationally renowned expert in machine learning, who dedicates to the technological innovation and commercialization of edge artificial intelligence (AI) chip. He serves as the member of MOST Strategic Planning Committee for New-generation Artificial Intelligence, and the member of Science and Technology Regulatory Committee, China Securities Regulatory Commission. He founded the Baidu Institute of Deep Learning (IDL), Baidu autonomous driving team, and Paddle Paddle project; once served as the head of Media Analytics Department at NEC Labs America; won the Best Paper Runner-up Award of ICML-2013; and acted as the Area Chair at International Conference on Machine Learning (ICML) and Conference on Neural Information Processing Systems (NIPS), as well as the adjunct professor at Stanford University. His papers were cited for over 20,000 times.

..... Guest Speaker



Gang WANG

**Senior Director of Autonomous Driving Lab, Alibaba Damo Academy
Distinguished Scientist of Alibaba AI Labs**

Dr. WANG was the Associate Professor with Nanyang Technological University, Singapore, the recipient of MIT Technology Review Innovators Under 35 Award (Asia), the Associate Editor of TPAMI, and the Area Chair of ICCV 2017 and CVPR 2018. He mainly focuses on the application of deep learning to CV and autonomous driving.

..... Guest Speaker



Xudong CAO

CEO of Momenta

Mr. CAO has over 10 years of experience in management, AI research and development. He has published over 10 papers on top-level computer vision conferences, including CVPR/ICCV/ECCV; ranked among the MIT Technology Review Innovators Under 35 Award (Asia); as well as worked as the Executive Director of R&D in SenseTime, and research fellow in Microsoft Research Asia. Some of his fundamental technologies have been used to products with hundreds of millions of users.

..... Guest Speaker



Ding ZHAO

**Director of AI Safety Lab
Assistant Professor of Carnegie Mellon University**

Prof. ZHAO obtained his PhD degree from the University of Michigan, and once worked as a research scientist at the university. He mainly focuses on the AI security, the intersection of statistical machine learning, and robotics, as well as the applications on autonomous vehicles, smart manufacturing, smart city and information security. His Accelerated Evaluation method for autonomous driving has been adopted by Mcity, Ford, Toyota, SAIC, Bosch and Uber.

..... Panel Guest Speaker



Nan MA

**Deputy Secretary-general of CAAI
Deputy Dean and Professor of College of Robotics, Beijing Union University**

Prof. MA is the head of Intelligent Interaction Group with Academician Deyi LI's unmanned vehicle team, Beijing Union University, and the Young and Mid-aged backbone Teacher of Beijing. She mainly focuses on the researches of interactive cognition, knowledge discovery and intelligent system. She has presided over multiple National Natural Science Fund and Beijing Natural Science Fund programs; won the championship of the Virtual Scenario Match, 2018 WIC World Intelligent Driving Challenge, the Special Award of the 2nd China "AI+" Innovation and Entrepreneurship Competition Final, the first and second prize of Beijing Teaching Achievements Award, and the third prize of CAHE Excellent Engineering Teaching Achievements Award; and published 3 monographs and teaching materials.

PM July 26th

Forum

Intelligence Education Forum

Meeting Room – 14

18:30–22:00

Time	Topics	Guest Speakers	Workplaces and Positions
Forum Chair/Host: Wanliang WANG Dean and Professor of College of Zhejiang University of Technology, The national-level famous teacher Fei WU Deputy Dean and Qiushi Distinguished Professor of the College of Computer Science and Technology Zhejiang University; Winner of the National Natural Science Fund for Distinguished Young Scholars			
18:30-19:10	AI Education for Humanities and Social Sciences Students	Wanliang WANG	Dean and Professor of College of Zhejiang University of Technology The national-level famous teacher
19:10-19:50	Thinking on the Education in an Intelligent Time	Fuchun SUN	Vice President of CAAI; Professor of Tsinghua University; Rwardee of National Natural Science Fund Distinguished Young Scholar IEEE/CAAI Fellow
19:50-20:30	AI Facilitates Experience Teaching	Honghai LIU	Professor of Harbin Institute of Technology, Shenzhen; IET Fellow
20:30-21:00	Smart Education: Analysis on Its Value and Problems	Di WU	Professor of Central China Normal University Deputy Director of China’s National Engineering Research Center for E-Learning
21:00-21:30	From A Major to A Discipline: The Crossed Development of AI Education	Fei WU	Deputy Dean and Qiushi Distinguished Professor of the College of Computer Science and Technology Zhejiang University Winner of the National Natural Science Fund for Distinguished Young Scholars
21:30-22:00	Four modules of AI literacy education	Juan DAI	General Manager of Education Business Department, SenseTime

..... Forum Chair/Host/Guest Speaker



Wanliang WANG

Dean and Professor of College of Zhejiang University of Technology
The national-level famous teacher

Prof. WANG is the doctoral supervisor, the Director of Zhejiang Key Lab of Visual Media Intelligent Technology, the rewardee of the special government allowance of the State Council, the leading talent of the National 100,000 Talents Project, and the outstanding teacher of Zhejiang Province. He also works as the member of MOE Steering Committee for Computer Science Teaching in Higher Education Institutions, the Vice President of National Alliance for Big Data Education in Higher Education Institutions, the Deputy Director of Zhejiang Provincial Steering Committee for Computer Science Teaching in Higher Education Institutions, the Vice President of Zhejiang Artificial Intelligence Society, the Vice President of Zhejiang Computer Science Society, the Vice President of Zhejiang Computer Application and Education Society, the counselor of Hangzhou Municipal Government, the President of Hangzhou Computer Institute, and the Vice President of Hangzhou Artificial Intelligence Association.



Fei WU

..... Forum Chair/Host/Guest Speaker
Deputy Dean and Qiushi Distinguished Professor of the College of Computer Science and Technology Zhejiang University

Winner of the National Natural Science Fund for Distinguished Young Scholars

Fei Wu received his B.Sc., M.Sc. and Ph.D. degrees in computer science from Lanzhou University, University of Macau and Zhejiang University in 1996, 1999 and 2002 respectively. From October, 2009 to August 2010, Fei Wu was a visiting scholar at Prof. Bin Yu's group, University of California, Berkeley. Currently, He is a Qiushi distinguished professor of Zhejiang University at the college of computer science. He is the vice-dean of college of computer science, and the director of Institute of Artificial Intelligence of Zhejiang University. He is the chairman of IEEE CAS Hangzhou-Chapter since Oct, 2018. He is currently the Associate Editor of Multimedia System, the editorial members of Frontiers of Information Technology & Electronic Engineering. He has won various honors such as the Award of National Science Fund for Distinguished Young Scholars of China (2016). His research interests mainly include Artificial Intelligence, Multimedia Analysis and Retrieval and Machine Learning.



Fuchun SUN

Vice President of CAAI
Professor of Tsinghua University

..... Guest Speaker

Rewardee of National Natural Science Fund Distinguished Young Scholar
IEEE/CAAI Fellow

Prof. SUN is the member of Academic Committee of Tsinghua University, the Director of Academic Committee of the Department of Computer Science & Technology, the Executive Deputy Director of National Key AI Technology & System Lab, and the member of Robotics Expert Team of National Key Research and Development Program. He also serves as the Editor-in-Chief of Cognitive Computation and Systems, the Associate Editor or Area Chief Editor of IEEE Trans. on Cognitive and Development Systems, IEEE Trans. on Fuzzy Systems, IEEE Trans. Systems, Man and Cybernetics, International Journal of Control, Automation and Systems, as well as the Editorial Board Member of Chinese Sciences: F and the ACTA AUTOMATICA SINICA.



Honghai LIU

Professor of Harbin Institute of Technology, Shenzhen
IET Fellow

..... Guest Speaker

Prof. LIU is the co-Editor-in-Chief of Springer J. Intelligent Robotics and Applications, and the Associate Editor of IEEE Trans. on Industry Electronics, IEEE Trans. on Cybernetics, IEEE Trans. Industry Informatics. He primarily focuses on multi-modal perception and understanding of human-machine systems, machine-enhanced medical systems and applications.



Di WU

Professor of Central China Normal University
Deputy Director of China's National Engineering Research Center for E-Learning

..... Guest Speaker

Prof. WU also serves as the Executive Deputy Director of MOE Educational Informatization Strategy Research Base (Central China), the Executive Director of Chinese Society of Educational Development Strategy, the Secretary-general of Future Education Special Committee, the member of MOE Expert Group of ICT in Education, and member of the MOE Expert Group of AI Technology Innovation, and the member of MOE Expert Group of Intelligent Education Demonstration Area Creation Program. He once presided over multiple national, provincial and ministerial programs as the National Sci-tech Support Plan program and the National Education Science Planning Program; and won the special prize for National Teaching Achievements Award and the MOE Award for Excellent Educational Science Achievements.



Juan DAI

General Manager of Education Business Department, SenseTime

..... Guest Speaker

Ms. DAI is responsible for the development of education business in SenseTime. She once worked as the Senior Product Manager in Siri Department, Apple Inc., leading the Siri data science team. Also she has served as the Senior Product Manager of Windows Phone in Microsoft, leading the headquarter input solution team and 3 East Asia teams, which designed and developed the machine-learning-based character input technology, and broke the Guinness World Records of fastest character input on touch screen with it in 2014. She mainly focuses on the researches of facial landmark and face recognition. She has published a paper as the first author on the International Conference on Machine Learning (ICML) 2006, and has obtained over 20 product and design patents.

PM July 26th

Concurrent Activities

CAAI AI Classroom & Cloud Classroom

Meeting Room 15

09:00–12:20

Time	Topics	Guest Speakers	Workplaces and Positions
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Host: Shaoping MA

Vice Chairman of CAAI Board of Supervisors

Deputy Acting Dean and Professor of Tiangong Research Institute for Intelligent Computing, Tsinghua University

CAAI Fellow

09:00-09:50	High-end Manufacturing Robot's Perception Control Technology and Application	Yaonan WANG	Supervisor of CAAI Board of Supervisors Academician of Chinese Academy of Engineering Professor of Hunan University
09:50-10:40	AI and Big Data	Changjun JIANG	Chairman of CAAI Board of Supervisors, Vice President and Professor of Tongji University CAAI Fellow
10:40-11:30	The Changes in Business Ecosystem Driven by the Disruptive AI Innovation	Yu HU	Co-founder and Rotating President of iFlyteck CAAI Fellow
11:30-12:20	AI Powers Innovation for New Infrastructure and Data Centers	Bin ZHOU	CTO, Ascend Computing Business, Huawei

..... Lecturer of AI Classroom



Yaonan WANG

**Supervisor of CAAI Board of Supervisors
Academician of Chinese Academy of Engineering
Professor of Hunan University**

Prof. WANG is an expert in robotics and intelligent control, and the Director of the National Engineering Lab for Visual Perception and Control Technology of Robots, Hunan University. He has won 1 second prize of National Technological Invention Award, 4 second prizes of National Scientific and Technological Progress Award, 11 first prizes of provincial and ministerial awards; obtained over 70 national invention patents, and honorary titles as the "National Outstanding Teachers of Higher Education Institutions," the "National May 1 Labor Medal," "National Advanced Worker," and the Second National Innovation Competition Award. He was selected as a talent to the National Talents Project. Now he also works in the Department of Energy and Transportation, Science and Technology Commission, Ministry of Education, and is the CCA/CCF Fellow.

..... Lecturer of AI Classroom



Changjun JIANG

**Chairman of CAAI Board of Supervisors; Vice President and Professor of Tongji University
CAAI Fellow**

Prof. JIANG is the Former Vice President of the CAAI Council, the winner of the National Natural Science Fund for Distinguished Young Scholars, and the Director of the MOE Key Lab of Embedded System and Service Computing in Tongji University. He mainly focuses on the researches of network concurrent theory, network risk prevention and control, network computing environment and information service; works as the chief scientist of National Key Research and Development Program; presided over 30 programs, including the integrated and key programs of National Natural Science Fund of China, National High Technology Research and Development of China and international key science and technology research and development program; and won the second prize of the 2016 and 2013 National Scientific and Technological Progress Award, the second prize of 2010 National Technological Invention Award, the first prize of provincial and ministerial natural science, technological invention, scientific and technological progress awards, and the Second National Innovation Competition Award.

..... Lecturer of AI Classroom



Yu HU

**Co-founder and Rotating President of iFlytek
 CAAI Fellow**

Dr. HU is the Former Vice President of the CAAI Council, the Director of Consumer Strategic Committee of IFLYTEK , the expert enjoying special allowance of the State Council, the member of the MOST Strategic Advisory Committee for New Generation Artificial Intelligence, the chief expert of the National 863 Humanoid Intelligence Priority Project sponsored by MOST , the Executive Director of National Engineering Lab for Speech and Language Information Processing, the Director of the Application Planning Group of CAS AI Industry, University and Research Institution Innovation Alliance, the part-time professor and doctoral supervisor of University of Science and Technology of China; He has won the Second National Innovation Competition Award; and he dedicates to the researches of intelligent speech and core AI technology, commercialization and ecosystem construction of the AI industry.

..... Lecturer of AI Classroom



Bin ZHOU

CTO, Ascend Computing Business, Huawei

Dr. ZHOU is the professor with the School of Information Science and Engineering, Shandong University. He has presided over multiple key research programs, including the GPU-based Global and Regional Assimilation and Prediction System (GRAPES) for weather prediction, face detection and recognition system, video processing system, and AI processor chip. He mainly focuses on the heterogeneous computing system and architecture, deep learning and machine learning, parallel computing and signal processing, and target detection, classification, identification, and tracking based on deep learning. He once served as the visiting professor or adjunct research professor at the University of Science and Technology of China (USTC), Beihang University, and George Mason University, the deep learning scientist at SenseTime, the global Vice President at NovuMind, and the NVIDIA CUDA Fellow. He owns over 10 patents, and published over 20 papers.

.....Program Committee Co-Chair/Host



Shaoping MA

**Vice Chairman of CAAI Board of Supervisors
 Deputy Acting Dean and Professor of Tiangong Research Institute for Intelligent Computing
 Tsinghua University
 CAAI Fellow**

Prof. MA is the Former Vice President of the CAAI Council, a doctoral supervisor, and the Director of the for Intelligent Information Acquisition Research Center, Institute of Artificial Intelligence, Tsinghua University. He dedicates to the researches of intelligent information processing, especially information retrieval, and realized a series of achievements; led the Information Retrieval Team to rank first of in web and information retrieval of CSRanking in the recent 10 years; and undertook multiple programs of “973 Project” , “863 Project” and National Natural Sciences Foundation.

PM July 26th

Concurrent Activities

“Towards the Future”

Clouding Sharing of Talents and Achievements in Hangzhou
The AI Development in Future Sci-Tech City

📍 Academic Exchange Center, Hangzhou Future Sci-Tech City

🕒 14:30–16:30

Time	Agenda	
14:30-14:40	Opening Ceremony	Cloud Sharing of AI Products from Hangzhou Future Sci-Tech City
14:40-14:50		Opening Remarks
14:50-15:05		Introduction of the Mass Innovation and Entrepreneurship Environment in the Future Sci-Tech City
15:05-15:10		Signing Ceremony of the Future Sci-Tech City Double Attraction and Double Introduction Project
15:10-15:15		Inactivating the “AI Cloud”
15:15-15:45	Panel	Opportunities and Challenges Faced by AI in the New Infrastructure Context
15:45-16:30	Project Roadshow	AI Project Roadshow

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Organizers



Co-Sponsor



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Supporters



Cooperative Media



Reporting Media



Advisors / Partners

Forums	Co-Sponsors
Post-pandemic Intelligent Manufacturing & Industrial Internet Application Forum	CAAI Intelligent Manufacturing Committee Huazhong University of Science and Technology
Brain Science & Artificial Intelligence Forum	Institute of Automation, Chinese Academy of Sciences University of Science and Technology of China
Big Data & Industry Prospect in the AI Context Forum	CAAI Intelligent Service Committee
Pattern Recognition Frontier Forum	CAAI Pattern Recognition Committee CSIG Machine Vision Committee
Sharing Intelligence Frontier Forum	Ant Group College of Computer Science and Technology, Zhejiang University Deqing Advanced Technology and Industry Institute, Zhejiang University
AI Women's Future Forum	CAAI Female Scientific and Technological Workers Committee Beijing Institute of Technology Beijing Pensees Intelligent Technology Co., Ltd.
Intelligent Autonomous Vehicles Forum	Tsinghua University
The Second AI Ethics Forum in the Global Context	CAAI AI Ethics Committee (In preparation)
Machine intelligence of Frontier Forum	Fudan University Xi'an Jiaotong University
Intelligent Interaction in the Interconnected Context Forum	University of Science and Technology of China
Forum of Swarm Decision-making and Control for Traffic Systems	CAAI Intelligent Transportation Committee
Robotic Environment Perception & Cognition Forum	Tianjin University Hunan University
Intelligence Education Forum	Zhejiang University of Technology Zhejiang University
New Media and Social Entertainment in the AI Era Forum	SINA News Zhejiang University
Smart Health-care Forum	Beijing University of Chinese Medicine Sichuan University
Intelligent Security Forum	Tsinghua University DAS-Security
AI & 5G Forum	AsiaInfo Linkage Baidu
Forum on Natural Language Processing	Tsinghua University Westlake University
Machine Learning Forum	Tsinghua University Shanghai Jiaotong University
AI Youth Forum	Harbin Institute of Technology Tsinghua University

iFLYTEK.Co.,Ltd.

Company Profile

Founded in 1999, iFLYTEK is the well-known intelligent speech and artificial intelligence public-traded company in the Asian-Pacific region. Since establishment it is devoted to the research and development of cornerstone technologies such as speech & languages, natural language understanding, machine learning & reasoning and adaptive learning, representing world-leading standards in those domains. iFLYTEK is also committed to developing A.I. empowered products and applications, with a vision of enabling machines to listen and speak, understand and think. Based with proprietary intellectual property rights, iFLYTEK has kept on expanding the scopes of businesses for full industrial coverage. Applications can be seen in consumer, education, city, customer-service, automobile, healthcare, home and various other sectors. iFLYTEK's top-notch performances on the research and industrialization of voice and A.I. technologies have been well-recognized by all sectors nationwide and abroad. It is with no doubt that iFLYTEK is a significant contributor of A.I. Team China. An A.I. ecological system orbited around iFLYTEK and with convergence of great partnerships is growing strongly and healthily.

Our Achievements

- "State Science and Technology Award" twice and the "Information Industry Technological Invention Award"
- One of the first national next generation A.I. open platforms
- The first state priority laboratory for cognitive intelligence
- The first national engineering laboratory for speech and language information processing
- National 863 industrialization base
- National intelligent speech industrialization base
- Lead unit for the national speech interactive standards workgroup
- State strategic planning key software enterprise
- National high-tech industrialization demonstration project
- In 2019, iFLYTEK became the Official Automated Translation Software Exclusive Supplier of the Olympic and Paralympic Winter Games Beijing 2022, striving to introduce to the world a great event in which all information is highly accessible and communication is open and free

< Innovation Sincerity
Professionalism
Striving



中国 智能 媒体 发展报告

2019-2020

Report on the Development of
Intelligent Media in China (2019-2020)

New Media Institute, Communication University of China
Sina AI Media Research Institute



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全场景、多模态、跨平台的AI同传解决方案

Full-scene, Multimodal, Cross-platform AI Simultaneous Interpreting Solution

百度是全球领先的人工智能平台型公司，百度翻译作为其核心AI能力之一，支持全球200多种语言互译，提供多模态、多领域的机器翻译服务，致力于帮助用户跨越语言鸿沟，方便快捷地获取信息和服务。为了更好地帮助国内外观众理解大会内容，百度翻译为本次大会提供机器同传服务。

Baidu is a world's leading AI company. Baidu Translate, one of Baidu's key AI capabilities, supports translation between 200 languages and provides multimodal and multi-domain machine translation services, aiming to help users overcome language barriers and have better access to information and language services. Baidu Translate provides AI simultaneous interpreting services for this conference.

会议同传服务方案

Simultaneous Interpreting Solution for Conference



行业术语定制

Terminology Customization



双语字幕投屏

Bilingual Subtitles



手机边听边看

Audiovisual Presentation



会议记录同步

Minutes Synchronization

特色优势

Features

端到端

End-to-End

高质量

High Quality

低延时

Low Latency

快捷部署

Easy Deployment

荣誉奖项

Awards

| 2015国家科学技术进步奖 二等奖

Second prize at the 2015 State Scientific and Technological Progress Award

| 2018中国专利银奖

2018 China Patent Silver Award

| 2019国际机器翻译评测 中英翻译第一

Top at Chinese-English tasks for the 2019 Conference of Machine Translation

| 2014中国电子学会科学技术奖 一等奖

First prize of the 2014 Scientific and Technological Progress Award of the Chinese Institute of Electronics

| 《麻省理工科技评论》2018十大突破技术语音翻译关键玩家

Speech Translation Key players amongst 10 Breakthrough Technologies 2018 by MIT Technology Review

| 2019新一代人工智能产业创新重点任务 入围揭榜单位

Shortlisted for the 2019 New Generation AI Innovation Key Task Undertakers



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Based on its world's leading full-scenario intelligent view brain system, Pensees boasts full-stack computer vision technologies, and continues to lead marginal innovation. The Pensees AI Research Institute team has won international AI competition champion 15 times since its establishment so far.

PES-Brain

Cloud Intelligence

Compatible with mainstream computing platform and supportive of domestic hardware and software system; Highly-module basic algorithm warehouse and supports component-based development and fast deployment; Strong intelligent computing and analysis capacity and enables many business scenarios.

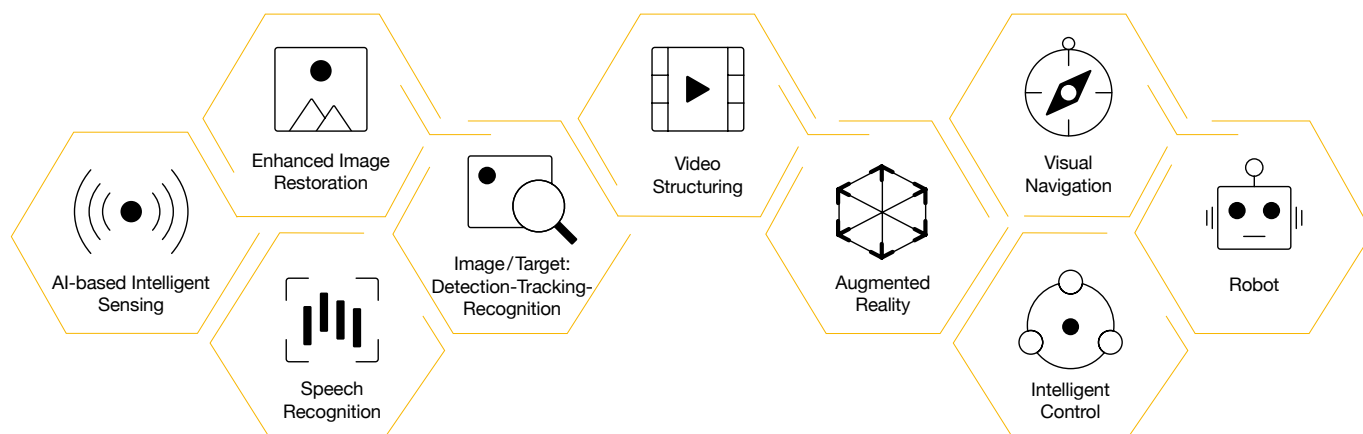
PES-Brain

Pensees boasts full-stack AI technologies and could-edge-device intelligent view brain algorithm engines, which enables an efficient AIOT solution covering various scenes and brings a closed-loop value for clients from various industries.

Edge Intelligence

A highly-efficient utilization of mature industrial solutions and compatible with various AI chips ; Extreme optimization of AI algorithm and undertake more AI applications simultaneously under limited computing power; Multi-modal algorithm covers ubiquitous scenes and supports new business scenes.

Multi-modal AI algorithm matrix based on computer vision technologies



Contact phone number: 400-1199-177

Website: www.pensees.ai

Address: Pensees.Ltd, 13F, North Tower of Kaisa Plaza, No.86 Jianguo Road, Chaoyang District, Beijing, China