



2025 INTERNATIONAL CONFERENCE ON ARTIFICIAL
INTELLIGENCE AND INFORMATION (ICAI 2025)

ICAI | 信息与智能国际会议
2025 International Conference on
Artificial Intelligence and Information
中国·西安

PROGRAM HANDBOOK

日程手册

Organizer: Xidian University

September 26-30, 2025
Xi'an, China



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THE 10th FORUM
FOR HUASHAN SCHOLARS(IFHS 2025)

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SPONSORS

WELCOME TO ICAI 2025

Welcome to Xi'an and Xidian University. On behalf of the organizing committee of ICAI 2025, we would like to extend the warmest welcome and best regards to you for your presence.

Informatization and intellectualization serve as the engines of new quality productive forces. The development in the fields of information and intelligence is the fundamental support for global scientific and technological innovation and industrial upgrading, bearing great strategic significance. In order to showcase high-level research achievements in the fields of information and intelligence, support the growth of outstanding academic talents, and promote international academic exchanges, Xidian University has specially founded International Conference on Artificial Intelligence and Information (ICAI).

The 2025 International Conference on Artificial Intelligence and Information (ICAI 2025) takes “Interdisciplinary Integration, Intelligent Iteration” as its theme. It aims to continuously leverage the university's comparative advantages and resource endowments in the fields of information and intelligence. The goal is to provide a platform for global scientists and entrepreneurs to exchange insights and pool their wisdom to tackle key problems together, and thus expand the “circle of friends” of mutual communication and integration between the academic and industrial communities. The conference contributes to solving the “bottleneck” problems in the relevant fields and promoting the leapfrog development of the global digital-intelligent industry.

Appreciate your consistent support to Xidian University. May ICAI 2025 be memorable and enriching experience for every participant.

General Chairs: 郑晓静 段宝岩 郝跃

CONFERENCE COMMITTEE

General Chairs



Xiaojing Zheng
Xidian University



Baoyan Duan
Xidian University



Yue Hao
Xidian University

International Committee Chairs



Zhonglin Wang
Member of EAS and EAE
Fellow of US NAI
Chinese Academy of Sciences



Xuemin Shen
Fellow of Royal Society of Canada
IEEE Fellow
University of Waterloo



Qiang Chen
IEICE Fellow
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Technical Program Committee Chairs



Tiejun Cui
IEEE Fellow
Southeast University



Zan Li
IEEE Fellow, IET Fellow
Vice-President of
Xidian University

Technical Program Committee Co-Chairs



Quan Wang
Vice-President of
Xidian University



Licheng Jiao
Foreign Member of AE
IEEE Fellow
Xidian University



Xianggen Xia
IEEE Fellow
University of Delaware

ICAI 2025 SCHEDULE

September 26: Registration of Experts and Scholars

September 27: Opening Ceremony and Plenary Speeches

TIME	ACTIVITIES	VENUE
09:00-09:45	Opening Ceremony	XDU Lnvengo Gymnasium
09:45-10:00	Coffee Break	
10:00-12:00	Plenary Speeches	
12:00-14:00	Lunch	
14:00-16:00	Plenary Speeches	XDU Lnvengo Gymnasium
16:00-16:15	Coffee Break	
16:15-17:45	Plenary Speeches	
18:30-20:30	Banquet	Xi'an Haotang International Hotel

September 28: Parallel Sessions

TIME	ACTIVITIES	
08:30-18:00	Session 1:	Frontier on Ubiquitous Intelligence Communication Network Technology

TIME	ACTIVITIES	
08:30-18:00	Session 2:	Space Precision Instruments and Intelligent Sensing
	Session 3:	Electromagnetic Information Detection and Sensing
	Session 4:	Semiconductor Devices and Integrated Circuits
	Session 5:	Advanced Computing and Intelligent Security
	Session 6:	Next-Generation Artificial Intelligence
	Session 7:	Electronic Machinery and Automation
	Session 8:	Intelligent Perception of Optoelectronic Information under Complex Environments
	Session 9:	Strong Field Atomic and Molecular Ultrafast Dynamics and Optoelectronic Information Sensing
	Session 10:	Talent Cultivation in the Field of Electronic Materials
	Session 11:	Information and Mechanics
	Session 12:	Mathematics and Statistics
	Session 13:	Advanced Medical Imaging & Intelligent Diagnosis and Treatment (AMI-IDT)
	Session 14:	Intelligent Era and Social Development
14:00-18:00	Experts Forum of Journal of Information and Intelligence	

September 29

TIME	ACTIVITIES	
09:00-12:00	The 10th Forum for HUASHAN Scholars (IFHS 2025)	
08:30-18:00	Parallel Sessions	

03

PLENARY SPEECHES



Zhonglin Wang

Chinese Academy of Sciences

Biography

Dr. Zhonglin Wang is a preeminent physicist and materials scientist whose groundbreaking work has revolutionized the fields of nanotechnology, energy harvesting, and self-powered systems. He currently serves as the Director of the Beijing Institute of Nanoenergy and Nanosystems and holds the distinguished titles of Regents' Professor and Hightower Chair (Emeritus) at the Georgia Institute of Technology. Dr. Wang is widely recognized as the pioneer of the nanogenerators field, which has enabled advancements in distributed energy, self-powered sensors, and large-scale blue energy. Additionally, he coined and developed the fields of piezotronics and piezo-phototronics, which have significant implications for third-generation semiconductors.

Dr. Wang's scientific impact is unparalleled. Among 100,000 scientists across all fields worldwide as ranked by Elsevier and Stanford, he has been ranked #1 for single-year scientific impact continuously from 2019 to 2024, #2 in career scientific impact, and #1 in Materials Science. His research has garnered over 500,000 citations on Google Scholar, with an extraordinary h-index of 337, underscoring his immense influence and contributions to science.

Speech Title

Piezotronics of the Third Generation Semiconductors

Speech Abstract

The classification of semiconductors is best given based on their crystallographic structures, which are the "DNA" s of general materials. The first generation semiconductors (Si, Ge) and the second generation semiconductors (GaAs) have a common characteristic that their crystal structures are cubic, so they exhibit the highest crystallographic symmetry. For the third generation semiconductors, such as GaN, SiC and ZnO, they have the hexagonal crystal structure. As for the fourth generation semiconductor such as Ga₂O₃, it has a monoclinic structure. Therefore, the non-centrosymmetric crystal structures at lower-symmetry for the third- and fourth-generation semiconductors make them distinctive different from the Si and GaAs owing to the piezoelectric effect that is generated by the polarization of ions in the crystal. A piezo-electric potential (piezopotential) is generated in the crystal by an externally applied strain. Electronics fabricated by using the inner-crystal piezopotential as a "gate" voltage to tune/control the charge transport behavior is named piezotronics, with applications in strain/force/pressure triggered/controlled electronic devices, sensors and logic units. Using the piezoelectric polarization charges at the pn junction to control charge carrier separation or combination process in optoelectronics is called the piezo-phototronic effect. This talk will focus on how to use piezo-phototronic effect to tune the efficiency of LED lighting and solar cells.



Xuemin (Sherman) Shen

University of Waterloo

Biography

Xuemin (Sherman) Shen is an University Professor at the University of Waterloo, Canada. His research interests include network resource management, wireless network security, AI for networks, and future communication systems. Professor Shen is the Technical Program Committee Chair for IEEE Globecom'24, Globecom'16, IEEE Infocom'14, and IEEE VTC'10 Fall. He was the Editor-in-Chief of the IEEE Internet of Things Journal, IEEE Network, and IET Communications. Professor Shen served as the 2022-2023 President of IEEE Communications Society. He is a Fellow of the IEEE, Royal Society of Canada, Canadian Academy of Engineering, and Engineering Institute of Canada, a Foreign Member of Chinese Academy of Engineering, and an International Fellow of the Engineering Academy of Japan.

Speech Title

High-Fidelity and Efficient Simulator for 6G Space-Terrestrial Integrated Networks

Speech Abstract

Space-terrestrial integrated networks are envisioned to realize a giant leap forward for the future sixth generation (6G) coverage expansion, bridging digital divide for remote areas and providing ubiquitous services. In this talk, we provide an overview of the team's recent endeavors in the high-fidelity and efficient simulator for 6G space-terrestrial integrated networks with low-Earth-orbit (LEO) mega-constellation satellites. Particularly, we introduce a systematic, scalable and comprehensive simulation architecture, which enables high-fidelity modeling of network configurations and high efficiency simulation of network operation and management capabilities, while providing users with intuitive visualizations. Our developed simulator can offer fresh perspectives and novel avenues for evaluating critical technologies and validating essential methods in the context of 6G space-terrestrial integrated networks and large-scale LEO constellation ultra-dense networking.



M. Jamal Deen

McMaster University

Biography

Dr. M. Jamal Deen is a Distinguished University Professor and the Dr. Haykin Distinguished Engineering Professor at McMaster University. As an educator, he won the inaugural SM Sze Education award from IEEE Electron Devices Society, the Ham Education Medal from IEEE Canada (highest award for educators), the McMaster University President's Award for Excellence in Graduate Supervision, and MSU Macademics' Lifetime Achievement Award for his exceptional dedication to teaching and significant contribution to student life, the community at large, and academia. Dr. Deen served as the elected President of the Academy of Science, The Royal Society of Canada in 2015-2017. Currently, he is serving as the inaugural elected Vice President (North) of The World Academy of Sciences, representing the developed countries. His current research interests are nanoelectronics, optoelectronics, nanotechnology, data analytics and their emerging applications to health and environmental sciences. Dr. Deen is a Distinguished Lecturer of the IEEE Electron Device Society for more than two decades now. His awards and honors include the Callinan Award as well as the Electronics and Photonics Award from the Electrochemical Society; a Humboldt Research Award from the Alexander von Humboldt Foundation; the Eadie Medal from the Royal Society of Canada; the McNaughton Gold Medal, the Fessenden Medal and the Gottlieb Computer Medal, all from IEEE Canada. In addition, he was awarded the five honorary doctorate degrees in recognition of his exceptional research, scholarly and education accomplishments, exemplary professionalism and valued services. Dr. Deen has also been elected Fellow status in fourteen national academies and professional societies including The Royal Society of Canada, the Chinese Academy of Sciences, the Canadian Academy of Engineering, IEEE, APS (American Physical Society) and ECS (Electrochemical Society). He was also elected to the Order of Canada, the highest civilian honor awarded by the Government of Canada.

Speech Title

Nanomaterials-based Sensors for Environment and Health Applications

Speech Abstract

Of the grand engineering challenges facing modern society, few are more pressing than ensuring the quality and availability of safe drinking water through advanced monitoring technologies. This is a critical challenge all over the world due to increased industrialization and urbanization. The global strain on water resources, intensified by industrialization and urbanization, necessitates a new generation of low-cost, easy-to-use, smart sensors built with readily available nanomaterials. Continuous, real-time assessment of water quality, from drinking and wastewater to environmental sources like rivers and groundwater, is vital for safeguarding public health. This quality is defined by a complex interplay of chemical, microbial, and physical parameters, including pH, free chlorine, dissolved oxygen, and temperature. Among these, pH is a critical indicator. The World Health Organization mandates a safe drinking water pH range of 6.5 to 9.5. Deviations signal serious problems: low pH can indicate nitrification or microbial activity, while high values may point to chemical spills. An imbalanced pH can cause gastrointestinal irritation, corrode infrastructure, and compromise disinfection processes. Furthermore, as pH is temperature-dependent, these two parameters must be monitored together. Conventional monitoring methods are expensive, labor-intensive, and many measure only one parameter at a time. These limitations are untenable for both densely populated cities and resource-limited remote areas. Therefore, there is a clear need for affordable, highly sensitive, and integrated sensing systems capable of simultaneous, on-demand measurement of multiple parameters. In this presentation, I will discuss our work using nanomaterials to create such a smart, integrated sensing system. We employ simple fabrication techniques like inkjet printing, solution processing and hand-drawn methods, to develop a low-cost, easy-to-use platform that concurrently measures pH, temperature, and chlorine. We will also demonstrate a new class of sensors to detect pharmaceuticals like acetaminophen. Finally, we will discuss our fully integrated hardware-software sensor, designed for robust deployment in diverse environments with minimal need for calibration or maintenance.



Laurence Tianruo Yang

Zhengzhou University

Biography

Laurence Tianruo Yang is the Academic Vice President of Zhengzhou University, a Chief Discipline Professor, and the Dean of the School of Computer and Artificial Intelligence and the School of Software. He earned a double bachelor's degree in Computer Science and Applied Physics from Tsinghua University and a Ph.D. in Computer Science from the University of Victoria, Canada. He is the Fellow of the Canadian Academy of Engineering, the Engineering Institute of Canada, the Academia Europaea, and the Nation Academy of Artificial Intelligence. He is also a Fellow of IEEE, IET, and AAIA. Prof. Yang has been recognized as a recipient of the National High-Level Overseas Talent Program, a Clarivate Analytics Highly Cited Researcher, a Stanford Top 2% World Scientist, a ScholarGPS Top 0.05% Worldwide Scholar, and an ACM Distinguished Scientist. He serves as the Chief Scientist for the National Major AI Research Project under the New Generation AI Plan (2030). His primary research focuses on Cyber-Physical-Social Intelligence.

Speech Title

Cyber-Physical-Social Intelligence: When Tensor-based AI Meets Cyber-Physical-Social Systems

Speech Abstract

With the rapid advancement of information technology, computer technology, and communication technology, human society has gradually evolved into a tightly coupled ternary hybrid space integrating humans, machines, and physical, which is also referred to as the Cyber-Physical-Social systems. One of the ultimate goals of Cyber-Physical-Social intelligence research is to provide personalized and proactive services for humans within this hybrid space. To this end, this report focuses on its background, current status, and how tensor-based AI, which we have been engaged in, empowers research and applications in Cyber-Physical-Social integration.



Wei Huang

Northwestern Polytechnical University

Biography

Professor Wei Huang is an academican of the Chinese Academy of Sciences (CAS), and an International Member of the National Academy of Engineering, USA (NAE). As an eminent scientist in the areas of organic optoelectronics, plastic electronics, intelligent electronics, health electronics, and flexible electronics, Prof. Huang chairs the State Key Laboratory for Organic Electronics and Information Displays (KLOEID), and the State Key Laboratory of Flexible Electronics (KLOFE) and is Chief Scientist of the National Basic (Frontiers) Science Center for Flexible Electronics of China. He is Chair Professor of the Cheung Kong Scholars Program, Winner of the National Outstanding Youth Fund, a distinguished professor of China's National Important High-level Talents Program, Chief Scientist of the National Basic Research Program (973 Program), the National Key Research Program, and the National Special Program of Disruptive Technologies of China. Prof. Huang is founding Editor-in-Chief of Research, the flagship journal of China Association for Science and Technology, Editor-in-Chief of npj Flexible Electronics, a Partner Journal of Nature Publishing Group. Currently, he is Chair of the Senate of Northwestern Polytechnical University (NPU), China. He also holds the position of Chief Scientist of the Frontiers Science Center for Flexible Electronics, NPU. Prof. Huang is the Immediate Past President of the Federation of Engineering Institutions of Asian and the Pacific, and a Senior Advisor to the President of the World Federation of Engineering Organizations (WFEO). He initiated the NPU-FEIAE Belt & Road Engineering Education Training Center (NFTC) and has built NFTC as a major international cooperation and communication platform for engineering education and science and technology development. His efforts have led to the success of the Africa, Asia, and the Pacific Engineering Education Accord (AAP Accord).

Speech Title

Forge New Quality Productive Forces and Build a Powerful Country in Flexible Electronics

Speech Abstract

Currently, China has entered a new phase of development driven by innovation, and the innovation in disruptive technologies is the most critical solution to breaking the western containment of China's development. Disruptive technologies, as represented by "FAMISHED" (namely, Flexible Electronics, AI, Materials Science, IoT, Space Science, Healthcare Science, Energy Science and Data Science), have made a profound impact on the current time. These eight key fields are the important opportunities for China to trailblaze for advancement in core technologies in key fields and strategic industries. Flexible electronics is a totally new technological field sharing equal performance with traditional microelectronics. It has unique features such as transformability, portability, light-weight, and large-area application, etc. It is a highly integrated form of disruptive technological innovation. Industrial Internet is a result of the new generation of information technology integrated with manufacturing, which is now driving industrial economy forward from digitalization to closer networking and smarter development. "Flexible Electronics+" will lead the future scientific and technological development of China, improve China's national competitiveness, and mutually promote the deep integration of networking with smart development and high-quality industrial development. It can give a powerful boost to China's switch from a big power to a strong power, which is significant in changing the global economic, profit and safety patterns.



Yiannis Vardaxoglou

Loughborough University

Biography

Professor Yiannis Vardaxoglou FREng, FIET, Life FIEEE is Dean of the Microelectronics School at South China University of Technology and Emeritus Professor at Loughborough University, UK. He founded the Wireless Communications Research (WiCR) group and the Centre for Mobile Communications Research, and served as Dean of Electronic, Electrical and Systems Engineering at Loughborough from 2006 to 2012. He led the EPSRC SYMETA Grand Challenge on 3D metamaterials for RF, microwave, and THz applications, and has pioneered research in additive manufacturing for advanced wireless systems. Professor Vardaxoglou has published over 500 papers, holds six patents, and has secured 18 EPSRC grants alongside significant industry funding. He has chaired major international conferences including EuCAP 2007, founded the Loughborough Antennas & Propagation Conference (LAPC), and served in leadership roles within the IET and IEEE Antennas and Propagation communities. His work continues to shape the future of RF engineering, antenna design, and metamaterial technologies.

Speech Title

3D Printed Microwave Hardware: New Capabilities in Design and Fabrication

Speech Abstract

Additive manufacturing is rapidly transforming the landscape of radio frequency (RF), microwave, and millimeter-wave engineering. By enabling unprecedented design freedom, lightweight and conformal structures, and fast prototyping cycles, 3D printing has moved beyond proof-of-concept demonstrations into practical devices for wireless, radar, and space applications. This keynote will highlight recent advances in materials, processes, and device integration—including low-loss printable dielectrics, high-resolution stereolithography with metallization, and direct-write conductive techniques—that are opening new possibilities in antennas, waveguides, filters, and metamaterials. Case studies will illustrate how these technologies are delivering competitive performance at frequencies extending into the millimeter-wave regime.

The talk will explore future trends that promise to reshape the field: ultra-low-loss printable ceramics and polymers, monolithic multi-functional RF systems, tunable and reconfigurable metasurfaces, AI-driven inverse design, and the qualification of 3D-printed hardware for space and defense missions. Together, these developments suggest a shift from rapid prototyping toward reliable production, positioning additive manufacturing as a key enabler for the next generation of wireless and sensing technologies.



Alessandro Giua

University of Cagliari

Biography

Alessandro Giua received a Laurea degree in electrical engineering from the University of Cagliari, Italy, in 1988 and master's and Ph.D. degrees in computer and systems engineering from the Rensselaer Polytechnic Institute, Troy, NY, USA, in 1990 and 1992, respectively. He is currently Professor of Automatic Control with the Department of Electrical and Electronic Engineering of the University of Cagliari. His research interests include discrete-event systems, hybrid systems, networked control systems, Petri nets and failure diagnosis. He has served as Editor-in-Chief of the IFAC journal Nonlinear Analysis: Hybrid Systems, Senior Editor of the IEEE Trans. on Automatic Control, and Department Editor of the journal Discrete Event Dynamic Systems. He is a Fellow of the IEEE and a Fellow of the IFAC for contributions to Discrete-Event and Hybrid Systems. He is a recipient of the People's Republic of China Friendship Award.

Speech Title

State Estimation of Partially Observed Discrete Event Systems under Attack

Speech Abstract

Partially observed discrete event systems are a general formalism dating back to the definition of nondeterministic automata. The assumption is that the sequence of events generated by a plant is observed through a mask, so that an agent observing the plant may have incomplete information concerning its evolution and, correspondingly, the past state trajectory and the current state.

The objective of this talk is to describe the basic principles of partially observable discrete event systems showing how the state estimation problem can be addressed for systems subject to cyber-attacks. An operator receives the sensor readings produced by a plant through a communication channel and uses this information to estimate the current state of the plant. The observation may be corrupted by an attacker which can insert and erase some sensor readings with the aim of altering the state estimation of the operator. Furthermore, the attacker wants to remain stealthy, namely the operator should not realize that its observation has been corrupted.

I will show how to determine an automaton, called joint estimator under attack, that describes for each possible observation produced by the plant and for each possible attack, what is the state estimation computed by the operator. Such a structure is obtained by the concurrent composition of two state observers, called attacker observer and operator observer. The joint estimator can be used to determine if there exists a stealthy harmful attack function such that the set of states consistent with the uncorrupted observation computed by the attacker, and the set of states consistent with the corrupted observation computed by the observer, satisfy a given relation.



Licheng Jiao

Xidian University

Biography

Jiao Licheng, a foreign member of the Academia Europaea and an IEEE Fellow, is currently a Huashan Distinguished Professor and Dean of the Institute of Artificial Intelligence at Xidian University. He is also Director of the Key Laboratory of Intelligent Perception and Image Understanding of the Ministry of Education, Director of the International Joint Research Center for Intelligent Perception and Computing, Director of the National Innovation and Talent Attraction Base for Intelligent Information Processing Science and Technology, an expert on the Ministry of Education's Artificial Intelligence Science and Technology Innovation Expert Group, one of the first recipients of the National Leading Talent Program, Chairman of the Belt and Road Artificial Intelligence Innovation Alliance, Chairman of the Shaanxi Artificial Intelligence Industry Technology Innovation Strategic Alliance, the 6th-7th Vice President of the China Association for Artificial Intelligence, President of the Asian Computational Intelligence Association, a Fellow of IEEE/IET/CAAI/-CAA/CIE/CCF/CSIG/AAIA/ACIS/AIIA, and has been selected as an Elsevier Highly Cited Researcher for eleven consecutive years. His research focuses on intelligent perception and image understanding, deep learning and brain-inspired computing, and evolutionary optimization and remote sensing interpretation. He has received the Second Prize of the National Natural Science Award, the Wu Wenjun Outstanding Contribution Award for Artificial Intelligence, the Qiushi Artificial Intelligence Outstanding Contribution Award, the title of National Model Teacher, and over ten provincial and ministerial-level scientific and technological awards of first prize or above.

Speech Title

The Next Generation of Artificial Intelligence Inspired by the Nobel Prize: Challenges and Opportunities

Speech Abstract

As is well known, the 2024 Nobel Prize in Physics and Chemistry has been awarded to artificial intelligence scholars, revealing the close connection between artificial intelligence and science and technology. This reflects that "AI for Science" promotes the reconstruction of scientific research methods, while "Science for AI" feeds back the credibility and adaptability of AI systems through physical mechanisms, domain knowledge, and expert rules. This report reviews the core technologies of artificial intelligence and big models, introduces their connotations and development, as well as the changes and challenges they have faced in the development process. Following that, in conjunction with the State Council's "AI+" action strategy, the team's ten basic AI models were introduced. Finally, based on the current development status, some thoughts and prospects were given from basic theory to applied research.



Chunming Rong

University of Stavanger

Biography

Prof. Chunming Rong has been an academician of the Norwegian Academy of Technological Sciences (NTVA) since 2011 and an academician of the World Digital Technology Academy (WDTA) under the United Nations (UN) framework since 2024. He works as the head of the Data-centered and Secure Computing (DSComputing) at the University of Stavanger (UiS) and as Chief Scientist (adjunct) at NORCE Norwegian Research Centre. He is also co-founder and CEO of two start-ups bitUnitor (previous bitYoga) and Dataunitor in Norway, both received EU Seal of Excellence Award in 2018. Prof. Rong is the chair of IEEE CS STC on Blockchain and is active in the IEEE Future Directions, where he served as a co-chair of IEEE Blockchain in 2018, as the chair of IEEE Cloud Computing 2017-2020, and as the founder and Steering Chair of IEEE CloudCom conference and workshop series. Furthermore, he is a fellow of Cloud Security Alliance (CSA) in Greater China Region and was the vice president of CSA Norway Chapter (2016-2017). He is Editors-in-Chief of the Journal of Cloud Computing by Springer, and co-Editors-in-Chief of the journal "Blockchain: Research and Applications" by Elsevier, has served as the steering chair (2016-2019), and associate editor of the IEEE Transactions on Cloud Computing (TCC) since 2016. Prof. Rong has extensive experience in managing large-scale R&D projects, both in Norway and EU. He has extensive contact network and projects in both the industry and academic. His research work focuses on cloud computing, cyber security, blockchain, with three granted EU/USA patents. He is a co-founder of the open-source initiative of Open Infrastructure-as-code (OpenIaC.org), fostering innovations on tokenized assets, providing foundation framework in several EU and Norwegian projects.

Speech Title

Large AI Models Built across Networks of Blockchains

Speech Abstract

The federated services of AI need a secure, accountable, and cooperative approach, where a decentralised secure computing continuum operates across legal silos in a cloud/edge environment.

The federated platform bitUnitor is proposed to virtually augment existing infrastructures with seamless integration of RAG agentic microservices in an automated MoE workflow managed under consensuses of smart contracts, involving the usage of digital assets identified by decentralised identifiers (DIDs), validated in a federated network of blockchain services, such as EBSI (European Blockchain Service Infrastructure). It allows each participating entity to maintain fine-grained control over its digital assets while sharing computational results using these assets. The following topics are essential components to be explored:

(1) Secure and process-centric digital asset and services composition across organisations; (2) Secure and quality critical service discovery, integration, and automation; (3) Trustworthy, adaptive, and quality critical business application testing; (4) Compliance auto-check and barrier overcoming.

The bitUnitor ecosystem will boost the competitiveness and capacity for trustworthy, secure, and data privacy preserving computing continuum. The integration and validation of breakthrough technologies will bring improvements in cyber-resilience and data protection for applications deployed in heterogeneous infrastructures. By integrating ethics aspects in a human-oriented design, seamless collaboration between humans and computing continuum systems can be realised.



Yuei-An Liou

Central University

Biography

Professor Yuei-An Liou is Chair Professor at the Center for Space and Remote Sensing Research, Central University, and Director of the Hydrology Remote Sensing Laboratory. He is a distinguished expert in spaceborne remote sensing and an elected Academician of both the Russian Academy of Engineering and the International Academy of Astronautics. He earned his B.S. in Electrical Engineering from Sun Yat-sen University in 1987 and dual Ph.D. degrees in Electrical & Computer Engineering and Atmospheric, Oceanic & Space Sciences from the University of Michigan in 1996.

Professor Liou has received numerous prestigious honors, including Honorary Life Membership from the Korean Society of Remote Sensing (2007), Distinguished Alumni Award from Sun Yat-sen University (2008), the Crystal Achievement Award from the Vietnam Academy of Science and Engineering and the Distinguished Lecture Award at the AOGS Annual Meeting (2023), and the Choen Kim Award from the Korean Society of Remote Sensing (2024). He has also been listed among the "Top 2% of Global Scientists" by Stanford University.

As Director of the Center for Space and Remote Sensing Research, Professor Liou has led efforts in land monitoring, disaster assessment, and ocean-atmosphere observation to address critical societal, economic, and ecological challenges. During the 2008 Sichuan earthquake, he provided the first high-resolution satellite imagery of the disaster zone, contributing significantly to emergency response and mitigation.

Speech Title

Assessing Global Eco-Environmental Vulnerability and Surface Water Stress under Climate and Anthropogenic Pressures

Speech Abstract

Climate change and intensified human activity are reshaping ecological dynamics, presenting growing challenges to environmental health, resource security, and climate resilience. Addressing these challenges requires innovative methodologies to quantify vulnerability and inform adaptive responses. This plenary lecture presents an innovative framework for quantifying environmental vulnerability using remote sensing (RS) data. Drawing on multi-temporal datasets from pre-pandemic (2016) and mid-pandemic (2020) periods, this research integrates image processing technologies with geospatial analytics to evaluate the evolving impacts of climate extremes and anthropogenic pressures. In addition, the Surface Water Availability-Temperature Index (SWATI) that was developed to support large-scale dryness monitoring will be presented. This integrated approach enables near-real-time monitoring of land surface dynamics, providing actionable insights for sustainable land use, agricultural planning, and water resource management. By bridging remote sensing, environmental modeling, and resilience science, the research advances image processing applications and supports the formulation of adaptive strategies for vulnerable communities. The findings contribute to climate adaptation efforts and carry broad implications for ecological protection and global sustainability.



Kaoru Yamanouchi

The University of Tokyo

Biography

Professor Kaoru Yamanouchi is Emeritus Professor of the University of Tokyo and now the Director of Institute for Attosecond Laser Science (I-ALFA) at the University of Tokyo. He is also Head of Quantum Frontiers Laboratory at Department of Chemistry, School of Science, the University of Tokyo. His research fields are in physical chemistry, especially, intense laser science, attosecond laser science, laser spectroscopy, chemical reaction dynamics, and quantum computing of atomic and molecular processes.

Born in Tokyo, Japan in 1957, he received Doctoral Degree from School of Science, the University of Tokyo in 1986. He was appointed as Assistant Professor at Department of Pure and Applied Sciences of the University of Tokyo in 1985. He was promoted to Associate Professor in 1990 in the same department, and then, to Professor at Department of Chemistry, School of Science, the University of Tokyo in 1997. He retired formally from the position of Professor in March 2023 and has been Project Professor of I-ALFA since April 2023.

He is Member of Chemical Society of Japan and American Physical Society, and Executive Committee Member of Japan Intense Light Field Science Society. He is also International Advisory Committee Member of Journal of Physics B: Atomic, Molecular and Optical Physics, Series Editor of Springer's Series in Chemical Physics, Series Editor of Springer's Series in Topics in Applied Physics, Chief Editor of Springer's Sub-series, "Progress in Ultrafast Intense Laser Science," and Editorial Board member of Chemical Physics (Elsevier). In the past two decades, as Chair or Co-chair, he has been organizing a series of international symposia on ultrafast intense laser science.

Speech Title

Ultrafast Dynamics of Diatomic and Triatomic Molecular Cations by Pump-probe Measurements Using Few-cycle Near-infrared Laser Pulses and the High-order Harmonics

Speech Abstract

Photoionization of molecules by XUV light creates molecular ions in both electronic ground and electronically excited states, exhibiting a variety of characteristic nuclear dynamics governed by the potential energy surfaces (PESs). By employing few-cycle near-IR (NIR) laser pulses and ultrashort extreme ultraviolet (XUV) pulses created as the high-order harmonics of the NIR laser pulses, we investigate the vibrational and dissociation processes of electronically excited O_2^+ and CO_2^+ in the time domain with high temporal resolution (~6 fs).

04 PARALLEL SESSIONS

SESSION 1

Frontier on Ubiquitous Intelligence Communication Network Technology

GENERAL CHAIRS



Jiandong Li
Xidian University



Yunsong Li
Xidian University



Min Sheng
Xidian University



Changle Li
Xidian University



Xiaoyan Zhu
Xidian University

EXECUTIVE CHAIRS



Nan Cheng
Xidian University



Kai Liang
Xidian University

SESSION GUESTS



Chengxiang Wang
Southeast University



Yue Gao
Fudan University



Zhenyu Xiao
Beihang University



Yong Xiao
Huazhong University of
Science and Technology



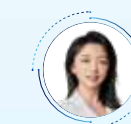
Haixia Zhang
Shandong University



Qixun Zhang
Beijing University of Posts and
Telecommunications



Haibo Zhou
Nanjing University



Zhijin Qin
Tsinghua University



Wei Quan
Beijing Jiaotong University



Qianqian Yang
Zhejiang University



Weidong Mei
University of Electronic Science and
Technology of China

SESSION INTRODUCTION

The Frontier Forum on Ubiquitous Intelligent Communication Networks will focus on cutting-edge communication technologies such as space-air-ground networks, 6G, artificial intelligence, and multimedia communications. Renowned experts from China and abroad have been invited to share their latest research findings.

Hosted by the School of Telecommunications Engineering and the State Key Laboratory of Integrated Services Networks, the forum will be held on September 28, 2025, at the North Campus of Xidian University.

ORGANIZER: School of Telecommunications Engineering
The State Key Laboratory of Integrated Services Networks

TIME: September 28, 2025

VENUE: Lecture Hall, Science and Technology Building, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-08:35	Welcome Speech		
08:35-09:05	3D Continuous-Space Radio Channel Measurements and Modeling Theory for 6G/B6G	Chengxiang Wang	Southeast University
09:05-09:35	TBD	Yue Gao	Fudan University
09:35-10:05	TBD	Zhenyu Xiao	Beihang University
10:05-10:15	Break		
10:15-10:45	Agentic AI Networking Theory and Prototype for 6G and Beyond	Yong Xiao	Huazhong University of Science and Technology
10:45-11:15	Intelligent Perception and Collaborative Transmission in Cloud-Edge Networks in Communication Link-Constrained Environments	Haixia Zhang	Shandong University
11:15-12:00	Research and practice on key technologies of communication and sensing integration for 6G	Qixun Zhang	Beijing University of Posts and Telecommunications

TIME	REPORT TITLE	SPEAKER	AFFILIATION
12:00-14:00	Lunch		
14:00-14:30	TBD	Haibo Zhou	Nanjing University
14:30-15:00	TBD	Zhijin Qin	Tsinghua University
15:00-15:30	Cross-Network Collaborative Reliable Transmission Mechanisms for Stereoscopic Communication	Wei Quan	Beijing Jiaotong University
15:30-16:00	TBD	Qianqian Yang	Zhejiang University
16:00-16:30	Movable-Antenna-Enabled High-Frequency Wireless Communications: Performance Optimization and Implementation Methods	Weidong Mei	University of Electronic Science and Technology of China
16:30-17:00	TBD	Paper Presentation	TBD

SESSION 2

Space Precision Instruments and Intelligent Sensing

GENERAL CHAIRS



Feng Zhou
Professor
Xidian University



Xiaoping Li
Professor
Xidian University



Lei Shi
Professor
Xidian University



Xiaolong Chen
Professor
Xidian University

TPC CHAIRS

EXECUTIVE CHAIRS



Pengfei Cheng
Professor
Xidian University



Min Yang
Professor
Xidian University

SESSION GUESTS



Yuchao Dai
Professor
Northwestern Polytechnical University



Chen Gong
Professor
University of Science and Technology of China



Yongcai Guo
Professor
Chongqing University



Wei Hao
Research Fellow
Xi'an Institute of Optics and Precision Mechanics, CAS



Mengwei Li
Professor
North University of China



Fangmeng Liu
Professor
Jilin University



Xiaochun Lu
Research Fellow
National Time Service Center, CAS



Xiaolin Ning
Professor
Beihang University



Bensheng Qiu
Professor
University of Science and Technology of China



Jintang Shang
Professor
Southeast University



Peng Sun
Professor
Jilin University



Haojie Xia
Professor
Hefei University of Technology



Xiaobin Xu
Professor
Beihang University



Gaofei Zhang
Research Fellow
Tsinghua University



Libo Zhao
Professor
Xi'an Jiaotong University

SESSION INTRODUCTION

The session “Space Precision Instruments and Intelligent Sensing” focuses on cutting-edge fields such as space exploration equipment, precision measurement technology, intelligent sensing systems, and space information processing. It brings together top experts and scholars in the domestic discipline of Instrument Science and Technology to share the latest research achievements and contribute to the high-quality development of the discipline. Co-hosted by the School of Aerospace Science and Technology of Xidian University and Key Laboratory of Equipment Efficiency in Extreme Environment, Ministry of Education. The session is scheduled to be grandly held on September 28, 2025, at the South Campus of Xidian University.

ORGANIZER: School of Aerospace Science and Technology

TIME: September 28, 2025

VENUE: Lecture Hall, 4th Floor, Library Building, South Campus, Xidian University

Key Laboratory of Equipment Efficiency in Extreme Environment, Ministry of Education

September 28 9:00-14:30

Part1: Invited Reports

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:10	Opening Ceremony		
09:10-09:30	Research Progress of Spacecraft Astronomical Navigation	Xiaolin Ning	Beihang University
09:30-09:50	Space-Based Detection Technology for Space Debris	Wei Hao	Xi'an Institute of Optics and Precision Mechanics
09:50-10:10	R&D of Photoelectric Micro-Nano Detection Technology and Equipment	Haojie Xia	Hefei University of Technology
10:10-10:30	Coffee Break, Photo		
10:30-10:50	Event Camera Vision: Motion Perception and Generation	Yuchao Dai	Northwestern Polytechnical University
10:50-11:10	Construction of High Performance Gas Sensors	Peng Sun	Jilin University
11:10-11:30	Key Technologies of Ultraviolet Communication and Positioning	Chen Gong	University of Science and Technology of China
12:00-14:30	Lunch		

September 28 14:30-18:00

Part2: Seminar on the Discipline Construction of Instrument Science and Technology

SESSION 3

Electromagnetic Information Detection and Sensing

GENERAL CHAIRS



Jinshan Ding
Xidian University



Qiang Chen
Tohoku University



Ying Liu
Xidian University



Huiqing Zhai
Xidian University

TPC CHAIRS

EXECUTIVE CHAIRS



Bian Wu
Xidian University



Jian Ren
Xidian University

SESSION GUESTS



Kwok Wa Leung
IEEE Fellow
City University of Hong Kong



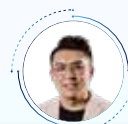
Qiaowei Yuan
Professor
Tohoku Institute of Technology



Hiroyasu Sato
Assistant Professor
Tohoku University



Yang Yang
Professor
University of Technology Sydney



Wei Lin
Assistant Professor
The Hong Kong Polytechnic University



He Zhu
Research Scientist
Commonwealth Scientific and Industrial Research Organization



Weibing Lu
Professor
Donghua University /Southeast University



Jixin Chen
Professor
Southeast University



Yongle Wu
Professor
Beijing University of Posts and Telecommunications



Lin-Sheng Wu
Professor
Shanghai Jiao Tong University



Ming-Chun Tang
Professor
Chongqing University



Jingbo Wu
Professor
Nanjing University



Qun Li
Ph.D
Hong Kong University of Science and Technology



Zhichao Sun
Ph.D
University of Technology Sydney



Zongrui Xu
Ph.D
City University of Hong Kong



Yang Xu
Ph.D
University of Technology Sydney

SESSION INTRODUCTION

The Session of Electromagnetic Information Detection and Sensing focuses on cutting-edge theories and core technologies in the fields of electromagnetic information detection, sensing, transmission, and manipulation. It invites domestic and international experts to share the latest research advancements. The Session is organized by the School of Electronic Engineering, National Key Laboratory of Radar Detection and Sensing, Shaanxi Provincial Key Laboratory of Ultra-Scale Electromagnetic Computing, and Electromagnetic Information Sensing Technology Base, and will be held in the North Campus of Xidian University on September 28-29, 2025.

ORGANIZER: School of Electronic Engineering

TIME: September 28, 2025

VENUE: Hall 104, Convention Center, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Opening Ceremony		
09:00-09:30	Inverse Design of Dielectric Resonator Antenna	Kwok Wa Leung	City University of Hong Kong
09:30-10:00	Impedance Matching Circuits	Qiaowei Yuan	Tohoku Institute of Technology
10:00-10:30	Low-Sidelobe Design of Liquid Chrystal-based Intelligent Reflecting Surface For 5G Communications	Hiroyasu Sato	Tohoku University
10:30-11:00	Revolutionizing Microwave Components with 3D/4D Additive Manufacturing	Yang Yang	University of Technology Sydney
11:00-11:30	AI-Assisted Wireless Power Transfer Enabled IoT Sensor System	Wei Lin	The Hong Kong Polytechnic University
11:30-12:00	High-Tc Superconducting Monolithic Microwave Integrated Circuits (MMICs) for High-sensitivity RF Receivers	He Zhu	Commonwealth Scientific and Industrial Research Organization
12:00-14:00	Lunch		

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:00-14:30	Fabric based Microwave Devices and Systems	Weibing Lu	Donghua University / Southeast University
14:30-15:00	A 200-GHz Wideband Transmitter and Receiver Chip for MIMO Radar	Jixin Chen	Southeast University
15:00-15:30	Research on Multifunctional Dielectric Devices and RF Chips	Yongle Wu	Beijing University of Posts and Telecommunications
15:30-16:00	Terahertz Transmitarrays Based on Thin-Film Technology	Lin-Sheng Wu	Shanghai Jiao Tong University
16:00-16:30	Electrically Small Huygens Source Antennas and Arrays: From Theory to Practice	Ming-Chun Tang	Chongqing University
16:30-17:00	Terahertz Programmable and Intelligent Metasurface	Jingbo Wu	Nanjing University

TIME: September 29, 2025
 VENUE: Hall 104, Convention Center, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:30-15:00	Millimeter-Wave Bandpass Filter Chips for 5G Mobile Terminals	Qun Li	Hong Kong University of Science and Technology
15:00-15:30	Next-Generation Antenna Arrays for Satellite Tracking and Communications	Zhichao Sun	University of Technology Sydney

TIME	REPORT TITLE	SPEAKER	AFFILIATION
15:30-16:00	Research on Conductive Bridging Memristive Switches-Based Reconfigurable RF Circuits on Silicon Substrate	Zongrui Xu	City University of Hong Kong
16:00-16:30	Analogue Multi-beamforming Networks and Antennas for B5G and 6G	Yang Xu	University of Technology Sydney

SESSION 4

Semiconductor Devices and Integrated Circuits

GENERAL CHAIRS



Xiaohua Ma
Xidian University



Xuefeng Zheng
Xidian University

SESSION INTRODUCTION

The “International Conference on Information and Intelligence” is scheduled to be hosted in Xidian University from September 26 to 30, 2025. As an important part of the conference, the Faculty of Integrated Circuits of Xidian University will organize the “Semiconductor Devices and Integrated Circuits Forum” on September 28. The forum will focus on cutting-edge theories and core technologies in this field. This forum is sponsored by the Faculty of Integrated Circuits of Xidian University, National Key Laboratory of Wide-Bandgap Semiconductor Devices and Integration Technology, the National Engineering Research Center of Wide Band-gap Semiconductor, the National Integrated Circuit Industry-education Integration Innovation Platform, the Innovation and Talent Introduction Base of Wide-Bandgap Semiconductor Devices and Micro-nano Electronics.

TIME: September 28th 2025

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:20	On-state performance enhancement of AlGaIn/GaN Fin-HEMTs by using arcuate sidewalls	Yilin Chen	Xidian University
09:20-09:40	SAFormer-ILT: Efficient Transformer with Sparse Attention for Mask Optimization	Xiangyu Jiang	Xidian University
09:40-10:00	Spatial-attentive SegNet with smoothed resist model for OPC	Delong Shu	Xidian University
10:00-11:00	Poster Presentation		

SESSION 5

Advanced Computing and Intelligent Security

GENERAL CHAIRS



Jiangtao Cui
Xidian University



Hui Li
Xidian University

TPC CHAIRS



Qingshan Li
Xidian University



Yulong Shen
Xidian University

EXECUTIVE CHAIRS



Li Yang
Xidian University



Rui Li
Xidian University



Xiaofeng Chen
Xidian University



Zilong Wang
Xidian University

SESSION GUESTS



Chi Man PUN
Professor
University of Macau



Yiu-ming Cheung
Professor
Hong Kong Baptist University



Special Guest
Adjunct Professor



Kim Fung TSANG
Professor
Shenzhen Institutes of Advanced Technology
Chinese Academy of Sciences



Tarik Taleb
Full Professor
Ruhr University Bochum



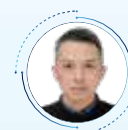
Zhi Jin
Professor
Peking University



Shangguang Wang
Professor
Beijing University of Posts and Telecommunications



Fan Wu
Professor
Shanghai Jiao Tong University



Geguang Pu
Professor
East China Normal University



Bin Xiao
Professor
Chongqing University of Posts and Telecommunications



Moti Yung
AAAS Member, IEEE/ACM Fellow
Columbia University



Willy Susilo
IEEE Fellow, ARC Laureate Fellow
University of Wollongong



Yang Xiang
IEEE Fellow
Swinburne University of Technology



Xiuzhen Cheng
IEEE/CSEE Fellow
Shandong University



Zhou Su
Professor
Xi'an Jiaotong University



Xinyi Huang
Professor
Jinan University



Debiao He
Professor
Wuhan University



Zheli Liu
Professor
Nankai University



Jian Shen
Professor
Zhejiang Sci-Tech University

SESSION INTRODUCTION

The Advanced Computing and Intelligent Security Forum is a premier platform dedicated to facilitating intellectual collaboration within the domains of computational intelligence, critical software and information security. The forum aims to convene leading experts from both domestic and international spheres to share pioneering research, technological applications, and notable case studies. Through academic presentations and interactive discussions led by a cohort of globally recognized academicians and experts, the forum endeavors to enhance the development of the university’s disciplines in computer science, software engineering and cyberspace security, while advancing the application and growth of computational intelligence, critical software and information security across various fields. The forum is organized by the School of Computer Science and Technology (National Pilot School of Software Engineering) , School of Cyber Engineering, National Project for Fundamental Theory of Big Data and Intelligent Analytics and National Project for Mobile Internet Security, and will be held on September 28, 2025, at the South Campus of Xidian University.

ORGANIZER: School of Computer Science and Technology (National Pilot School of Software Engineering)
TIME: September 28, 2025
VENUE: Hall A1-101, Conference Center, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-08:40	Opening Ceremony		
08:40-09:20	Object Segmentation with Test-Time Training and Promptable Models	Chi Man PUN	University of Macau
09:20-10:00	Compact Neural Network via Stacking Hybrid Units	Yiu-ming Cheung	Hong Kong Baptist University
10:00-10:20	Coffee Break & Group Photo		
10:20-11:00	AI for Industrial Automation: Applications and Challenges	Special Guest	——
11:00-11:40	User Intention-Driven IoT Application Prototype Generation	Zhi Jin	Peking University
11:40-14:00	Lunch & Break		
14:00-14:40	Satellite Computing System	Shangguang Wang	Beijing University of Posts and Telecommunications
14:40-15:20	Mobile Intelligent Computing	Fan Wu	Shanghai Jiao Tong University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
15:20-15:40	Coffee Break		
15:40-16:20	Exploration of Empowering Industrial Software with Artificial Intelligence Technology	Geguang Pu	East China Normal University
16:20-17:00	High Traffics AMI Driving Standards	Kim Fung TSANG	Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences
17:00-17:40	Multi-Domain Resource Orchestration in the Edge-Cloud Continuum: Leveraging AI for Deployment, Lifecycle Management, Migration, and Security	Tarik Taleb	Ruhr University Bochum

ORGANIZER: School of Cyber Engineering (National Top-Tier School of Cyber Security)
TIME: September 28, 2025
VENUE: Hall 103, Conference Center, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-08:50	Opening Ceremony & Group Photo		
08:50-09:30	Connecting AI and Cryptography	Moti Yung	Columbia University
09:30-10:10	The Human Factor as the Achilles' Heel of Security: When Temporal Opportunity and Spatial Advantage Align, Yet Human Harmony Falter	Xiuzhen Cheng	Shandong University
10:10-10:30	Tea / Coffee Break		
10:30-11:10	Fortifying AI: From Training to the Real World	Yang Xiang	Swinburne University of Technology

TIME	REPORT TITLE	SPEAKER	AFFILIATION
11: 10-11: 50	When AI Meet Cybersecurity in the Audio Domain	Willy Susilo	University of Wollongong
11: 50-14: 00	Lunch & Break		
14: 00-14: 40	Key Issues for Incentive Scheme in Federated Learning under Bounded Rationality	Zhou Su	Xi'an Jiaotong University
14: 40-15: 20	Towards Understanding and Enhancing Security of Proof-of-Training for DNN Model Ownership Verification	Xinyi Huang	Jinan University
15: 20-15: 40	Tea / Coffee Break		
15: 40-16: 20	Optimization Design of Secure Multi-Party Computation (MPC) Protocols	Zheli Liu	Nankai University
16: 20-17: 00	Distributed Data Security Mechanisms in Cloud-Edge Systems	Jian Shen	Zhejiang Sci-Tech University
17: 00-17: 40	SecureGPT: A Framework for Multi-Party Privacy-Preserving Transformer Inference in GPT	Debiao He	Wuhan University

SESSION 6

New-Generation Artificial Intelligence

GENERAL CHAIRS



Licheng Jiao

Xidian University



Biao Hou

Xidian University

TPC CHAIRS



Weisheng Dong

Xidian University



Fu Li

Xidian University

EXECUTIVE CHAIRS



Xu Tang

Xidian University



Xiaohui Hou

Xidian University

SESSION GUESTS



Honggui Han

Beijing University of Technology



Ran He

Institute of Automation
Chinese Academy of Sciences



Wen Jiang

Northwestern
Polytechnical University



Xudong Kang

Hunan University



Zechao Li

Nanjing University
of Science and Technology



Qingshan Liu

Nanjing University of
Posts and Telecommunications



Yiping Liu

Hunan University



Pinghui Wang

Xi'an Jiaotong University



Xia Wu

Beijing Institute of Technology



Wei Zhang

Shandong University

SESSION INTRODUCTION

The Sub-Forum on New-Generation Artificial Intelligence aims to establish a high-level academic exchange platform, bringing together renowned experts and scholars in the field of artificial intelligence to jointly discuss the cutting-edge theories, key technologies, and application trends of artificial intelligence. Driven by the continuous demand of the industry, artificial intelligence has continuously achieved key breakthroughs from perceptual intelligence to cognitive intelligence and autonomous intelligence, and has increasingly become a core driving force for social progress and industrial upgrading.

The forum will focus on key topics such as multimodal intelligence, large models and generative AI, human-machine collaboration and interaction, and intelligent computing architectures. It will conduct in-depth discussions on how to promote in-depth empowerment of artificial intelligence in key fields through technological innovation and interdisciplinary integration, so as to better serve the country's major strategic needs.

Hosted by the School of Artificial Intelligence, Xidian University, the forum will be grandly held at the South Campus of Xidian University on September 28, 2025.

ORGANIZER: School of Artificial Intelligence
Key Laboratory of Intelligent Perception and Image Understanding of Ministry of Education

TIME: September 28, 2025

VENUE: Lecture Hall, Student Centre, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Opening Ceremony		
09:00~09:30	Intelligent Affective Computing—From Facial Expression Recognition to Multimodal Computing	Qingshan Liu	Nanjing University of Posts and Telecommunications
09:30-10:00	Real-Time Simulation and Intelligent Scheduling for Large-Scale Waste Electrical and Electronic Equipment (WEEE) Recycling	Honggui Han	Beijing University of Technology
10:00-10:30	Knowledge Enhancement of Multimodal Pre-trained Models for Visual-Semantic Correlation Learning	Zechao Li	Nanjing University of Science and Technology
10:30~10:45	Coffee Break		
10:45-11:15	Novel Neural Network Theories and Methods Inspired by Brain Functional Mechanisms	Xia Wu	Beijing Institute of Technology
11:15-11:45	Research and Outlook on Multimodal Foundation Models	Ran He	Institute of Automation Chinese Academy of Sciences

TIME	REPORT TITLE	SPEAKER	AFFILIATION
11:45-12:00	Introduction and Outlook of the Journal Intelligent Computing	Jinyu Hu	Zhejiang Lab
12:00-14:30	Lunch		
14:30-15:00	Research and Progress in Large Model-Driven Robotic Learning	Wei Zhang	Shandong University
15:00-15:30	Intelligent Fusion, Interpretation and Applications of Multimodal Remote Sensing Data	Wen Jiang	Northwestern Polytechnical University
15:30-16:00	Hyperspectral Remote Sensing Image Acquisition and Processing	Xudong Kang	Hunan University
16:00-16:20	Coffee Break		
16:20-16:50	Exploration of attribute filtering vector retrieval methods for artificial intelligence applications	Pinghui Wang	Xi'an Jiaotong University
16:50-17:20	Intelligent Molecular Design and Synthesis	Yiping Liu	Hunan University

SESSION 7

Electronic Machinery and Automation

GENERAL CHAIRS



Bin Zi
Xidian University



Jin Huang
Xidian University



Congsi Wang
Xidian University



Weidong Wang
Xidian University



Xuechao Duan
Xidian University

EXECUTIVE CHAIRS



Peng Li
Xidian University



Yiqun Zhang
Xidian University



Shuxin Zhang
Xidian University

SESSION GUESTS



Xinyu Liu
Dalian University of Technology



Alessandro Giua
University of Cagliari



Agostino Marcello Mangini
Polytechnic University of Bari



Ke Feng
Xi'an Jiaotong University



Gregory Faraut
University of Paris-Saclay



Guoying Gu
Shanghai Jiao Tong University



Xiao Jia
Shandong University



Kais Klai
University Sorbonne Paris Nord



Murat Uzam
Bozok University



Fei Ren
Shanghai Aerospace Equipment Manufacturer Co., Ltd



Bo Song
Huazhong University of Science and Technology



Thao Dang
University Grenoble Alpes



Yongqiang Xiao
EFORT Intelligent Robot Homo Sapiens Co., Ltd.



Kuize Zhang
Xi'an Jiaotong University



Jie Zhong
Zhejiang Normal University



Xiangfu Zhao
Yantai University

SESSION INTRODUCTION

The Electronic Machinery and Automation Session will focus on cutting-edge theories and core technologies such as electromechanical coupling fundamentals, intelligent sensing, and supervisory control in high-end equipment manufacturing. Nearly 20 renowned scholars and young talents from around the world have been invited to share their latest research progress. The event will be held grandly on September 28-29, 2025, in Room III-237 of the Main Building at the North Campus of Xidian University.

ORGANIZER: School of Mechano-Electronic Engineering
TIME: September 28, 2025
VENUE: Hall III-237, Main Building, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:20	opening words		
09:20-9:50	Robotic Micro and Nanomanipulation: Technologies and Applications	Xinyu Liu	Dalian University of Technology
09:50-10:20	Soft Robotic Hand Design and Application	Guoying Gu	Shanghai Jiao Tong University
10:20-10:35	Coffee Break		
10:35-11:05	Research Progress on Electromagnetic Stealth Functional Structures Fabricated by Additive Manufacturing	Bo Song	Huazhong University of Science and Technology
11:05-11:35	Demonstration Application of AI-Based Inspection for Large-Scale Launch Vehicle Components	Fei Ren	Shanghai Aerospace Equipment Manufacturer Co., Ltd
11:35-12:05	Exploration of Intelligent Industrial Robotics: Pathways, Applications, and Future Trends	Yongqiang Xiao	EFORT Intelligent Robot Homo Sapiens Co., Ltd.

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TIME: September 28, 2025
VENUE: Hall III-237, Main Building, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:00-14:30	Digital Twin-Driven Health Management and Remaining Useful Life Prediction of The Gearbox Transmission System	Ke Feng	Xi'an Jiaotong University
14:30-15:00	Multimodal Intelligence in Medical Modeling: Methods and Applications	Xiao Jia	Shandong University
15:00-16:00	Young Scholars Forum		
14:30-15:00	Youth Talent Development Seminar Venue: III-145, Main Building, North Campus of Xidian University		
17:00-17:30	Visit the State Key Laboratory of Electromechanical Integrated Manufacturing of High-performance Electronic Equipment High-performance Electronic Equipment		

TIME: September 29, 2025
VENUE: Hall III-237, Main Building, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:05	opening words		
09:05-09:45	SOG-Based Design-time Verification and Supervision of DES Opacity	Kais Klai	University Sorbonne Paris Nord
09:45-10:25	Verification of Strong Detectability of Labeled Real-time Automata	Kuize Zhang	Xi'an Jiaotong University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
10:25-10:40	Coffee Break		
10:40-11:20	Siphon-Based Divide-and-Conquer (SbDaC) Policy for Enforcing Liveness on Petri Net Models of FMS Suffering from Deadlocks or Livelocks	Murat Uzam	Bozok University
11:20-12:00	Fault Diagnosis of Discrete-Event Systems Using Automata	Xiangfu Zhao	Yantai University

TIME: September 29, 2025
VENUE: Hall III-237, Main Building, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:30-15:10	Dynamical Analysis of Boolean Networks and Distributed Pinning Control	Jie Zhong	Zhejiang Normal University
15:10-15:50	Identification of Discrete Event Systems: From Models to Digital Twins	Gregory Faraut	University of Paris-Saclay
15:50-16:10	Coffee Break		
16:10-16:50	Learning of Switched Nonlinear Dynamical Systems	Thao Dang	University Grenoble Alpes
16:50-17:30	Application of Deep Reinforcement Learning for Traffic Control of Road Intersection with Autonomous Vehicles	Agostino Marcello Mangini	Polytechnic University of Bari

TIME: September 29, 2025
VENUE: Hall III-145, Main Building, North Campus, Xidian University

ORAL PRESENTATIONS		
TIME	REPORT TITLE	SPEAKER
08:30-08:45	Thermal and Fluidic Investigation on a Designed Double-Layered Microchannel Heat Sink Integrating Multi-Outlets and Bifurcation	Shen Han
08:45-09:00	Buckling Stiffness Design of Self-Deployable Thin-Shell Structures	Henan Wei
09:00-09:15	Integral Terminal Sliding Mode Predictive Control for Permanent Magnet Synchronous Motor Based on Disturbance Compensation	Chenjie Zhou
09:15-09:30	Better Choice for Deep Learning Inputs Convert 1D X-Spectral Data into 2D X-Encoded Graphics	Yafeng Qi
09:30-09:45	Multi-Information Fusion for Real-Time Intelligent Detection of Additive Manufacturing	Ruichan Lv
09:45-10:00	Efficient Interval Analysis of Radomes Based on Vertex-Controlled Convex Polygons	Tongtian Wang
10:00-10:15	TD3-based Trajectory Optimization for Cable-Driven Parallel Robots in Spray Painting Applications	Xin Zhang
10:15-10:30	Coffee Break	
10:30-10:45	A Rapid Calculation Method of Critical Cable Coupling Spacing In Crosstalk	Jingqi Zuo

ORAL PRESENTATIONS		
TIME	REPORT TITLE	SPEAKER
10:45-11:00	A Design Method of Carbon Fiber Honeycomb Core Reflector Based on Thermal Coupling Deformation	Wenjian Jiang
11:00-11:15	Study and Optimization of Parameters for the Designed Double-layer Height Ratio Impingement Jet Microchannel Heat Sinks	Manqin Wang
11:15-11:30	Ankle Joint Assistive Exoskeleton with Cable-Driven Actuation Based on Iterative Learning Control	Jibo Song
11:30-11:45	Discussion on Finite Element Method of Microsystem Package Structure for Thermal Stress	Ziyi Lu
11:45-12:00	Design of a Multilayer Frequency Selective Surface Structure with Air Gaps	Weihaio Wang

SESSION 8

Intelligent Perception of Optoelectronic Information under Complex Environments

GENERAL CHAIR



Lixin Guo
Professor

TPC CHAIRS



Huixin Zhou
Professor



Bing Wei
Professor

EXECUTIVE CHAIRS



Peng Gao
Professor



Jiajie Wang
Associate Professor

SESSION GUESTS



Yuei-An Liou
Central University



Steven Gao
IEEE Fellow



Zhongxiang Shen
IEEE Fellow



Zeev Zalevsky
IEEE Fellow,
Optica Fellow, SPIE Fellow



Gérard Gouesbet
Professor



Igor V Minin
Professor



Oleg V Minin
Professor



Denis Lebrun
Professor



Marc Brunel
Professor



Kuanfang Ren
Professor



Qingsheng Zeng
Professor



Cheung Wai Chan
Professor



Tomasz Kozacki
Professor



Pierre Anthony Pantaleón Peralta
Researcher



Tani Rin
Researcher



Xin Yu
Associate Professor



Leonardo André Ambrosio
Associate Professor



Wei Lin
Associate Professor



Mikołaj Rogalski
Associate Professor



Julianna Winnik
Associate Professor



Shitala Prasad
Associate Professor



Arun Pattathal Vijayakumar
Associate professor



Ankur Gogoi
Associate Professor



Sachleen Singh
Postdoctor

SESSION INTRODUCTION

The Sub-forum on “Intelligent Perception of Optoelectronic Information under Complex Environments” focuses on the fundamental theories, key technologies, and applied research in areas such as the optoelectronic characteristics of environments and targets, quantum physics, photoelectric detection, optoelectronic information and image processing, and biomedical imaging and processing. The forum will invite more than 20 academicians and renowned experts from China and abroad to share the latest research advances. Hosted by the School of Physics at Xidian University and the International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment (OPCE), it will be held from September 28 to 30, 2025, at the Xi’an Grand Barony Hotel.

ORGANIZER: School of Physics
The International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment.

TIME: September 28, 2025
VENUE: Xi’an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00–09:30	Machine learning for microwave radiation based remote and obscured bio-sensing	Zeev Zalevsky	Bar-Ilan University
09:30–10:00	AI-Driven Multimodal Sensing and Fusion-Opportunities and Challenges	Jinchang Ren	Robert Gordon University
10:00–10:30	Coffee Break		
10:30–11:00	On laser light propagating in free space at a speed slower than the speed of light: The case of Bessel-Gauss beams	Gerard Gouesbet	University of Rouen Normandy
11:00–11:30	The Superresonance and related phenomena: The Discoveries That Was Not Done More Than One Hundred Years Ago (I)	Igor V. Minin, Oleg V. Minin	Siberian State University of Geosystem and Technologies
11:30–12:00	The Superresonance and related phenomena: The Discoveries That Was Not Done More Than One Hundred Years Ago (II)	Igor V. Minin, Oleg V. Minin	Siberian State University of Geosystem and Technologies
12:10–14:00	Lunch		

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:00-14:30	A Dual-Band Multi-Beam Reflectarray Antenna Based on Polarization Selection Technique for Sub-Terahertz Applications	Qingsheng Zeng	University of Quebec
14:30-15:00	Hyperspectral remote sensing, AI and important Earth Observation applications	Cheung-Wai Chan	Free University of Brussels
15:00-15:30	AI-Assisted Wireless Power Transfer Enabled Supercapacitor - Energized IoT Sensor System	Wei Lin	The Hong Kong Polytechnic University
15:30-16:00	Coffee Break		
16:00-16:30	Bioengineered Apoptotic Bodies for Trauma Brain Injury Therapy	Zhen Yuan	University of Macau
16:30-17:00	Towards Robust and Reliable Fourier Ptychographic Microscopy for High-Resolution, Large Field-of-View Biomedical Imaging	Piotr Zdańkowski	Warsaw University of Technology
17:00-17:30	Human Pose Estimation for Individuals with Limb deficiencies	Xin Yu	University of Queensland
18:30-20:00	Banquet		

ORGANIZER: School of Physics
 The International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment.

TIME: September 29, 2025

VENUE: Xi'an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	A presentation of experimental Digital In-line holographic configurations for 3D velocity/size measurement of particles in fluids	Denis Lebrun	University of Rouen Normandy

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:30	Shape measurements at high resolution using digital holographic microscope	Tomasz Kozacki	Warsaw University of Technology
09:30-10:00	Characterization of ice particles using interferometric particle imaging	Marc Brunel	University of Rouen Normandy
10:00-10:30	Coffee Break		
10:30-11:00	Physics-Informed, GAN-Centric Super-Resolution Leveraging Camera Optics for Enhanced Optoelectronic Perception	Arun Pattathal Vijayakumar	Indian Institute of Information Technology
11:00-11:30	Unconventional Superconductivity and Optical Signatures of Highly-doped Graphene	Pierre A. P. Peralta	Instituto Madrileño de Estudios Avanzados en Nanociencia
11:30-12:00	Artificial Cortex from Evolution: Synthesizing Multimodal Intelligence for Next-Generation AI	Lin Gu	RIKEN AIP
12:00-14:00	Lunch		
14:00-14:30	Ultra-Wideband Wide-Angle-Scanning Phased Array Antennas for Integrated Sensing and Communications and 6G NTN	Steven Gao	The Chinese University of Hong Kong
14:30-15:00	2D and 3D lensless holographic microscopy	Mikolaj Rogalski	Warsaw University of Technology, Poland
15:00-15:30	Diffraction gratings aided common-path optical diffraction tomography	Julianna Winnik	Warsaw University of Technology
15:30-16:00	Coffee Break		
16:00-16:30	Cross-Modal Perception: Fusing Optoelectronic and Visual Data with Deep Learning	Shitala Prasad	Indian Institute of Technology
16:30-17:00	Nonlinear control of structured light	Sachleen Singh	University of the Witwatersrand
17:00-17:30	Full analytical description of the remodeling of a “frozen wave”-type structured beam after an arbitrary number of pair of lenses for light scattering applications	Leonardo Ambrosio	University of São Paulo
18:00-20:00	Dinner		

ORGANIZER: School of Physics
The International Academic Platform for Optoelectronic Perception Science and
Technology under Complex Environment.
TIME: September 30, 2025
VENUE: Xi'an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Wide-Band Antennas of Low Profile	Zhongxiang Shen	National University of Singapore
09:00-09:30	Airy theory improved with uniform approximation and Vectorial Complex Ray Model	Kuanfang Ren	University of Rouen Normandy
09:30-10:00	High-Resolution Carrier Transport and Efficiency Mapping in Semiconductor Devices with Laser Scanning OBIC Microscopy	Ankur Gogoi	Jagannath Barooah University
10:10-10:20	Coffee Break		
10:30-12:00	Academic Salon of Graduate students		
12:00-14:00	Lunch		
14:00-16:00	Academic Salon of Graduate students		
16:00-16:30	Closing Ceremony		

SESSION 9

Strong Field Atomic and Molecular Ultrafast Dynamics and Optoelectronic Information Sensing

GENERAL CHAIRS



Huailiang Xu
Xidian University



Jing Chen
University of Science and Technology of China



Hanlin Qin
Xidian University



Hao Sun
Xidian University



Fei Liu
Xidian University

EXECUTIVE CHAIRS



Lin Wang
Xidian University



Lixin Liu
Xidian University

SESSION GUESTS



Kaoru Yamanouchi
professor



Jinchang Ren
professor



Zhen Yuan
professor



Piotr Zdańkowski
research assistant professor



Weifeng Yang
professor



Jing Chen
University of Science and Technology of China



Liangyou Peng
Professor



Xiaojun Liu
Professor



Haifeng Xu
Professor



Yujun Yang
Professor



Wu chengyin
Professor



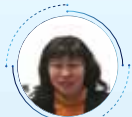
Weidong Li
Professor



Zengxiu Zhao
Professor



Xiaoxin Zhou
Professor



Bingbing Wang
professor



Guangwei Hu
assistant professor



Lin Wang
researcher



Kaiwen Ji
Postdoc
Institut d'Optique Qraduate School



Hngtag Wang
Postdoc
Singapore University of Technology and Design



Sheng Qu
Postdoc
Goethe University Frankfurt

SESSION INTRODUCTION

The sub-forum on “Strong Field Atomic and Molecular Ultrafast Dynamics and Optoelectronic Information Sensing (SFAMPC&IWOP 2025)” aims to discuss the application progress of optoelectronic information sensing technology in atomic, molecular and other fields around new phenomena, new methods and new technologies of atomic and molecular ultrafast physics, and improve the application of optoelectronic information sensing technology in multiple cross-cutting fields.

The forum invited fourteen academicians and renowned experts from China and abroad to share the latest research progress. The forum is hosted by the School of Optoelectronic Engineering of Xidian University and the International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment (OPCE). It will be held at Xi’an Grand Barony Hotel from September 28 to 30, 2025.

ORGANIZER: School of Optoelectronic Engineering
The International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment

TIME: September 28, 2025

VENUE: Xi’an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:30	Machine learning for microwave radiation based remote and obscured bio-sensing	Zeev Zalevsky	Bar-Ilan University
09:30-10:00	AI-Driven Multimodal Sensing and Fusion-Opportunities and Challenges	Jinchang Ren	Robert Gordon University
10:00-10:30	Coffee Break		
10:30-11:00	On laser light propagating in free space at a speed slower than the speed of light: The case of Bessel-Gauss beams	Gerard Gouesbet	University of Rouen Normandy
11:00-11:30	The Superresonance and related phenomena: The Discoveries That Was Not Done More Than One Hundred Years Ago (I)	Igor V. Minin, Oleg V. Minin	Siberian State University of Geosystem and Technologies
11:30-12:00	The Superresonance and related phenomena: The Discoveries That Was Not Done More Than One Hundred Years Ago (II)	Igor V. Minin, Oleg V. Minin	Siberian State University of Geosystem and Technologies
12:10-14:00	Lunch		

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:00-14:30	A Dual-Band Multi-Beam Reflectarray Antenna Based on Polarization Selection Technique for Sub-Terahertz Applications	Zhi Jin	Peking University
14:30-15:00	Hyperspectral remote sensing, AI and important Earth Observation applications	Cheung-Wai Chan	Free University of Brussels
15:00-15:30	AI-Assisted Wireless Power Transfer Enabled Supercapacitor - Energized IoT Sensor System	Wei Lin	The Hong Kong Polytechnic University
15:30-16:00	Lunch		
16:00-16:30	Bioengineered Apoptotic Bodies for Trauma Brain Injury Therapy	Zhen Yuan	University of Macau
16:30-17:00	Towards Robust and Reliable Fourier Ptychographic Microscopy for High-Resolution, Large Field-of-View Biomedical Imaging	Piotr Zdańkowski	Warsaw University of Technology
17:00-17:30	Human Pose Estimation for Individuals with Limb deficiencies	Xin Yu	University of Queensland
18:30-20:00	Banquet		

ORGANIZER: School of Optoelectronic Engineering
The International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment

TIME: September 29, 2025

VENUE: Xi’an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Coherent Emission and Attosecond Absorption of Molecules Driven by Strong Laser Fields	Zengxiu Zhao	National University of Defense Technology

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:30	Femtosecond-Laser-Induced Electron Dynamics in Condensed-Phase Matter	Chengyin Wu	Peking University
9:30-10:00	The Process of Single-Photon Compton Scattering of Bound Electrons in an Intense Laser Field	Bingbing Wang	Institute of Physics, CAS
10:00-10:30	Coffee Break		
10:30-11:00	Complex-time dynamical processes in tunneling	Weifeng Yang	Hainan University
11:00-11:30	Non-perturbative perspective of atomic resonance ionization in intense laser fields	Jing Chen	University of Science and Technology of China
11:30-12:00	Desorption of Atomic and Molecular Anions in Ultrafast Laser Fields	Haifeng Xu	Jilin University
12:00-14:00	Lunch		
14:00-14:30	Approximate solution and application of periodic driven two-level system	Weidong Li	Shenzhen Technology University
14:30-15:00	Enhancement of Single-Order High-Order Harmonics	Xiaoxin Zhou	Northwest Normal University
15:00-15:20	Composite Vortex Air Laser	Huailiang Xu	Xidian University
15:30-16:00	Coffee Break		
15:50-16:20	Reinforced optical cage systems enable drift-free single-molecule localization microscopy (online)	Lin Wang	Central Laser Facility, Rutherford Appleton Laboratory, Science and Technology Facilities Council, UK
16:20-16:50	Hyperbolic Polaritonics with Bulk Optical Crystals (online)	Guangwei Hu	Nanyang Technological University
18:00-20:00	Dinner		

ORGANIZER: : School of Optoelectronic Engineering
 The International Academic Platform for Optoelectronic Perception Science and Technology under Complex Environment
TIME: September 30, 2025
VENUE: Xi'an Grand Barony Hotel

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Extreme Ultraviolet Optical Frequency Combs and Their Applications	Xiaojun Liu	Innovation Academy for Precision MeasurementScience and Technology, Chinese Academy of Sciences
09:00-09:30	Berry phase in laser-solid interactions	Liangyou Peng	Peking University
09:30-10:00	Simulating High-Order Harmonic Generation in Gases Using Machine Learning Approaches	Yujun Yang	Jilin University
10:00-10:20	Coffee Break		
10:20-10:50	Non-Hermitian photonic crystal nanolaser array	Kaiwen Ji	Institut d'Optique Graduate School
10:50-11:20	Novel three-dimensional photonic devices driven by two-photon lithography	Hongtao Wang	Singapore University o Technology and Design
11:20-11:50	Analysis of electron quasi-particle-phonon interactions by terahertz spectroscopy	Sheng Qu	Goethe University Frankfurt
14:00-16:00	Lunch		
14:00-16:00	Postgraduate Academic Forum		
16:00-16:30	Closing Ceremony		

SESSION 10

Talent Cultivation in the Field of Electronic Materials

HONORARY CHAIR



Yue HAO
Xidian University

GENERAL CHAIRS



Li YANG
Xidian University



Lin GENG
Secretary-General of the
Teaching Guidance Committee for
Materials Science
Harbin Institute of Technology



Gangfeng SONG
Xidian University



Yichun ZHOU
Xidian University



Hongquan ZHUANG
Deputy Director
Tsinghua University Press



Linfeng LAN
South China University
of Technology



Yongzhen WANG
Taiyuan University of Technology



Huan YE
Huazhong Agricultural
University



Yongjun HUO
Beijing Institute of Technology



Jing GUO
Peking University



Ruqiang ZOU
Peking University



Huiqing FAN
Northwestern Polytechnical
University



Jie SHEN
Wuhan University of Technology



Shangfeng YANG
University of Science and
Technology of China



Tiejun WANG
Beijing University of Posts and
Telecommunications



Xuefeng ZHANG
Hangzhou Dianzi University



Hongquan ZHUANG
Tsinghua University Press



Jiang WANG
Guilin University of
Electronic Technology



Shufen CHEN
Nanjing University of Posts and
Telecommunications



Xiaomin WANG
Taiyuan University of Technology



Fugang QI
Xiangtan University



Shengguo LU
Guangdong University of Technology



Yaming ZHANG
Xi'an University of Posts and
Telecommunications



Jinan NIU
China University of Mining and
Technology

SESSION GUESTS



Wei HUANG
Northwestern
Polytechnical University



Bingbo WEI
Northwestern
Polytechnical University



Haiping FANG
East China University of
Science and Technology



Yang BAI
University of Science and
Technology Beijing



Qing WAN
Yongjiang Laboratory



Yanglong HOU
Sun Yat-sen University
Peking University



Chungang DUAN
East China Normal University



Jinxing ZHANG
Beijing Normal University



Feng LUO
Nankai University



Xiaobin NIU
University of Electronic Science and
Technology of China



Li YANG
Xidian University



Longwei YIN
Shandong University



Peiguo LIU
National University of
Defense Technology



Dongqing LIU
National University of
Defense Technology



Jizhong SONG
Zhengzhou University



Linfeng SUN
Beijing Institute of Technology



Dengfeng LI
Chongqing University of Posts and
Telecommunications



Haijun WU
Xi'an Jiaotong University



Gang NIU
Xi'an Jiaotong University



Wenxia YUAN
University of Science and
Technology Beijing

SESSION INTRODUCTION

Information and intelligent technology represent a critical direction in the new round of scientific and technological revolution as well as industrial transformation. Leveraging its distinctive strength in electronic and information education, Xidian University has established an internationally recognized academic conference—the International Conference on Artificial Intelligence and Information (ICAI). This conference focuses on facilitating exchanges in cutting-edge research, talent development, innovation integration, and talent acquisition in the fields of information and intelligent technology. The second International Conference on Information and Artificial Intelligence, ICAI 2025, will be held at Xidian University from September 27 to 28, 2025. During the conference, on September 28, the School of Advanced Materials and Nanotechnology at Xidian University and Tsinghua University Press will jointly host a symposium on “Talent Cultivation in the Field of Electronic Materials” . The symposium aims to foster discussions on talent development needs, system construction, curriculum and textbook development, exploration of training models, cultivation of top-notch talent, and disciplinary development in the field of electronic materials. It also seeks to promote the deep integration and interdisciplinary development of electronic materials talent cultivation alongside information technology and intelligent technology.

ORGANIZER: School of Advanced Materials and Nanotechnology
Tsinghua University Press
TIME: September 28, 2025
VENUE: Lecture Hall 210, Administration Building, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-09:00	Opening Ceremony Opening Address by the Leadership of Xidian University Address by Laifeng Li from the Technical Institute of Physics and Chemistry, Chinese Academy of Sciences Video Address by Ning Shi, Son of Mr. Shi Changxu Address by Xin, Zhao Director of Tsinghua University Press Electronic Materials Alliance & Shi Changxu Class Alliance Inauguration Ceremony		
09:00-09:40	"Dawn Breaks in the East — Do Not Say We Start Too Early" Accelerating the Double First-Class Initiative, Fostering New Quality Productive Forces, and Driving High-Quality Development	Wei Huang	Northwestern Polytechnical University
09:40-10:00	Development and Talent Cultivation at Peking University College of Materials Science and Engineering in the Context of Emerging Engineering Education	Ruqiang Zou	Peking University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
10:00-10:20	"Cultivating Both Virtue and Expertise, Integrating Theory with Practice" —— Talent Cultivation Practices at the School of Chemistry and Materials Science, University of Science and Technology of China	Shangfeng Yang	University of Science and Technology of China
10:20-10:30	Coffee Break		
10:30-10:50	Integration of Electronic Materials Research and High-Quality Talent Cultivation with Distinctive National Defense Features in the New Era	Huiqing Fan	Northwestern Polytechnical University
10:50-11:10	Carry Forward the Innovation gene in Electronic Materials, Build New Heights in Talent Cultivation at UESTC	Xiaobin Niu	University of Electronic Science and Technology of China
11:10-11:30	Innovation and Practice of Talent Cultivation Model in Electronic Materials through Tri-Domain Convergence	Li Yang	Xidian University
11:30-11:50	Development Report of the Magnetic Materials Discipline Platform at HDU	Xuefeng Zhang	Hangzhou Dianzi University
11:50-12:10	Exploration and Practice of an Electronics Industry-Oriented Talent Cultivation Model for Materials Specialty	Jiang Wang	Hangzhou Dianzi University
12:10-13:30	Lunch		
13:30-13:50	Exploration and Practice of Textbook Development for Emerging Engineering Education in the Digital and Intelligent Era	Hongquan Zhuang	Tsinghua University Press

TIME	REPORT TITLE	SPEAKER	AFFILIATION
13:50-14:10	Exploring Talent Training Models Integrating Materials Specialties with Intelligent Technologies under the Emerging Engineering Education Framework	Xiaomin Wang	Taiyuan University of Technology
14:10-14:30	Inheritance and Innovation of Materials Discipline at Wuhan University of Technology	Jie Shen	Wuhan University of Technology
14:30-14:50	Practice and Exploration in Discipline Development of Nano Science and Engineering	Dengfeng Li	Chongqing University of Posts and Telecommunications
14:50-15:10	AI Empowering Physics Experiments: The Path of Digital and Intelligent Exploration	Tiejun Wang	Beijing University of Posts and Telecommunications
15:10-15:30	Genuine Materials, Pursuit of Perfection: Introduction to Materials Discipline at National University of Defense Technology	Dongqing Liu	National University of Defense Technology
15:30-15:40	Coffee Break		
15:40-16:00	Exploration of Innovative Talent Cultivation in Flexible Electronics under the "Discipline Navigation · Tri-Education Integration" Model	Shufen Chen	Nanjing University of Posts and Telecommunications
16:00-16:20	Interdisciplinary Integration in Electronic Materials: Practices and Reflections on Discipline Development, Talent Cultivation, and Resolving Bottleneck Technologies	Shengguo Lu	Guangdong University of Technology
16:20-16:40	From "Mineral Source" to "Microchip": Exploration and Reflection on the Characteristic Talent Cultivation Model of Electronic Information Materials at China University of Mining and Technology	Jinan Niu	China University of Mining and Technology
16:40-17:00	Ideological Education Soul-Forging; Literacy-Oriented Foundation; Sci-Education Integration: Reform and Practice in Cultivating Top-Tier InnovativeTalents for Materials Science Majors	Fugang Qi	Xiangtan University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
17:00-17:20	Exploration in Experimental Teaching of Digital-Physical Integration for Electronic Packaging Technology Major	Yongjuan Huo	Beijing Institute of Technology
17:20-17:40	Reforming Electronics and New Energy Materials Education through Industry-Education Integration	Yaming Zhang	Xi'an University of Posts & Telecommunications
17:40-18:30	Huashan Scholars Forum		

TIME: September 27, 2025

VENUE: Lecture Hall 210, Administration Building, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
13:30-13:50	Three-Dimensional NaCl ₂ Crystal with Wide-Bandgap Semiconductor Properties at Ambient Conditions	Haiping Fang	East China University of Science and Technology
13:50-14:10	Chemical Synthesis and Performance Modulation of Two-Dimensional Magnetic Nanomaterials	Yanglong Hou	Sun Yat-sen University / Peking University
14:10-14:30	Nature-Inspired Computing Based on Ferroelectric Materials	Chungang Duan	East China Normal University
14:30-14:50	Temporary Bonding and Precision Thinning of Large-Area Wafers	Qing Wan	Yongjiang Laboratory
14:50-15:10	Ferroelectric Metasurface	Jinxing Zhang	Beijing Normal University
15:10-15:30	Autonomous Experimental Technology and Intelligent R&D Platform for Advanced Ceramic Materials	Yang Bai	University of Science and Technology Beijing
15:30-15:50	X-Ray Characterization and Inspection Techniques for Semiconductor Manufacturing	Feng Luo	Nankai University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
15:50-16:00	Coffee Break		
16:00-16:15	Advanced Manufacturing of Luminescent Quantum Dots	Jizhong Song	Zhengzhou University
16:15-16:30	High-Mobility and High-Stability Rare-Earth Doped Oxide Semiconductors and Their Mass Production Application in Display Panel Production Lines	Linfeng Lan	South China University of Technology
16:30-16:45	Modulation of Hafnium Oxide Thin Films and Their Exemplary Applications in More-than-Moore Integrated Circuits	Gang Niu	Xi'an Jiaotong University
16:45-17:00	State Modulation and Device Integration of Low-Dimensional Materials for Brain-Inspired Computing	Linfeng Sun	Beijing Institute of Technology
17:00-17:15	Point Defects and Ordered Structure Modulation in Electronic Functional Materials	Haijun Wu	Xi'an Jiaotong University
17:15-17:30	Bimetallic Combinations in Transition Metal Chalcogenides for Electrocatalytic Hydrogen Evolution Research	Wenxia Yuan	Beijing University of Science and Technology
17:30-17:45	Data-Driven Paradigm in Energy Materials: Research Examples	Yongzhen Wang	Taiyuan University of Technology
17:45-18:00	Research on Cold-Sintered High-Performance Microwave Dielectric Materials	Jing Guo	Xi'an Jiaotong University

SESSION 11

Information and Mechanics

GENERAL CHAIRS



Xiaojing Zheng

Xidian University



Peter Wriggers

Professor
Academician of the German
National Academy of
Sciences and Engineering

TPC CHAIRS



Mengdao Xing

Xidian University



Yinghui Quan

Xidian University



Ke Jin

Xidian University

EXECUTIVE CHAIRS



Juan Ma

Xidian University



Yang Lu

Professor
Fellow of the Hong Kong Young
Academy of Sciences

SESSION GUESTS



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Xidian University



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Academician of the German
National Academy of
Sciences and Engineering



Yoshiki YAMAGUCHI

Professor
Fellow of the Engineering
Academy of Japan



Jie Zhang

Professor



Yang Lu

Professor
Fellow of the Hong Kong Young
Academy of Sciences



Daniel OSSMANN

Professor



Kaiming BI

Professor



Giuseppe Muscolino

Professor



Phutphalla KONG

Professor



Va HONGLY

Professor



Antonina Pirrotta

Professor



Yifan Zhao

Professor



Michael Beer

Professor



Ali Zolghadri

Professor



Mario Di Paola

Professor



Junshi Xia

Senior Scientist

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SESSION INTRODUCTION

The Forum on Information and Mechanics focuses on exploring the intersection of cutting-edge theories and advanced technologies, showcasing the latest research progress through presentations by leading domestic and international experts. Co-organized by the School of Information Mechanics and Sensing Engineering at Xidian University, the Ministry of Education’s Joint Laboratory of International Cooperation on Structural Mechanics of Composite Materials for Electronic Devices, the Shaanxi Innovation Base for Talent Introduction in Extreme Mechanics and Applications, the Shaanxi Key Laboratory of Space Extreme Detection, the Shaanxi Innovation Center for Multi-source Fusion Detection and Recognition, Academy of Advanced Remote Sensing Technology of Xidian University, and Xi'an Municipal Key Laboratory of Advanced Remote Sensing Technology, the forum will be grandly held at the North Campus of Xidian University from September 28 to 29, 2025.

ORGANIZER: School of Information Mechanics and Sensing Engineering
Academy of Advanced Interdisciplinary Research
TIME: September 28, 2025
VENUE:Room 306, West Wing Building of the Library, North Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-11:30	Multiscale Mechanical Theories and Analytical Techniques of Polymer Composites in the Field of Semiconductor Packaging	Haolin Wang	Inha University, South Korea
	Research on Fluid MechanicsDriven by Data and Constrained by Physics	Junle Liu	The Royal Institute of Technology, Sweden
	Biomimetic Bio mechanical Sensors for Intelligent Wearable Interfaces	Muzi Xu	University of Cambridge, UK
	Probing Physical Properties of Ferric Oxide Films via Optical Second Harmonic Generation	Shuai Xu	The Institute of Physics, Chinese Academy of Sciences, China
	Learning to See Like an Infant: Bridging Early Visual Development and Deep Learning	Zhengyang Yu	Goethe University, Germany
	Advanced Remote Sensing for Ecosystem Monitoring and Conservation Biology	Yuwen Pang	The Smithsonian Conservation Biology Institute, US
12:00~14:00	Break		
14:00-14:25	Efficient Numerical Methods for Stochastic Dynamics Analysis of Fractional Structures	Alfredo Musculino	University of Messina, Italy

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:25-14:50	Deep Learning for Cloth Material Classification Using Simulation Data	Hongly VA	Cambodia Academy of Digital Technology, Cambodia
14:50-15:15	Capturing aleatory and epistemic uncertainties in time dependent reliability analysis	Michael Beer	Leibniz University Hannover, Germany
15:15-15:40	Self-similarity of fractional differential equations enforced by white noise processes	Mario Di Paola	Università degli Studi di Palermo, Italy
15:40-16:05	Coffee Break		
16:05-16:30	How Hyperspectral Image Classification can be related to Statistical Information Theoretics?	Gabriel Dauphin	University Paris XIII, France
16:30-16:55	Hilbert Transform very useful for Structural Health Monitoring	Antonia Pirrotta	Università degli Studi di Palermo, Italy
16:55-17:20	AI-Assisted Laminate Design	Yifan Zhao	Cranfield University, UK
17:20-17:45	Methodological pathways for Risk Mitigation in Reduced Crew Aviation Operations: Safety Matters	Ali Zolghadri	University of Bordeaux, France
17:45-18:10	Urban Water Environment and Water Security Based on Information Sensing and Artificial Intelligence	Luo Pingping	Chang'an University, China

TIME: September 29, 2025
VENUE: Room 306, West Wing Building of the Library, North Campus, Xidian University

TIME	SPEAKER
08:30-08:35	Opening speech
08:35-08:45	Speech by Professor Xiaojing Zheng, Academician of the Chinese Academy of Sciences
08:45-08:55	Speech by Professor Yinghui Quan, Dean of the School of Information Mechanics and Sensing Engineering
08:55-09:00	Conference photo session

TIME	REPORT TITLE	SPEAKER	AFFILIATION
09:00-09:20	Rethinking Fault Detection: Toward Hybrid Monitoring Architectures	Daniel Ossmann	Hochschule München University of Applied Sciences, Germany
09:20-09:40	Flexible sensor technologies: where the performance and manufacturability meet	Zhang Jie	Jiangnan University, China
09:40-10:00	Seismic Behaviours of Segmental Columns-Supported Bridges	Bi Kaiming	Hong Kong Polytechnic University, China
10:00-10:20	Seismic Behaviours of Segmental Columns-Supported Bridges	Phutphalla Kong	Cambodia Academy of Digital Technology, Cambodia
10:20-10:30	Coffee Break		
10:30-10:50	Nanomechanics of semiconductors and elastic strain engineering	Yang Lu	The University of Hong Kong, China
10:50-11:10	The Evolving Role of FPGAs in Shaping Next-Generation ICT	Yamaguchi Yoshiki	University of Tsukuba, Japan
11:10-11:30	Third media contact for multi-field applications	Peter Wriggers	Leibniz University Hannover, Germany
11:30-11:50	Mapping High-Resolution Land Cover Products Anywher	Junshi Xia	Institute of Physical and Chemical Research, Japan
	Lunch break		

SESSION 12

Mathematics and Statistics

GENERAL CHAIR



Lijun Bo

Xidian University

TPC CHAIRS



Weifeng Gao

Xidian University



Shiliang Wu

Xidian University

EXECUTIVE CHAIRS



Hao Dong

Xidian University



Xixi Jia

Xidian University



Jing Li

Xidian University

SESSION GUESTS



Junzhi Cui

Academy of Mathematics and
Systems Science,
Chinese Academy of Sciences



Zhaojun Wang

Nankai University



Defeng Sun

The Hong Kong
Polytechnic University



Yungang Liu

Shandong University



Mou Chen

Nanjing University of Aeronautics
and Astronautics



Deyu Meng

Xi'an Jiaotong University

SESSION INTRODUCTION

As a national team in the field of information and intelligence, Xidian University has always been guided by the development philosophy that “innovation is driven by talent.” In order to showcase high-level research achievements in the fields of information and intelligence, support the growth of outstanding academic talents, and promote international academic exchanges, Xidian University has specially founded International Conference on Artificial Intelligence and Information (ICAI). The 2025 International Conference on Artificial Intelligence and Information (ICAI2025) takes “Interdisciplinary Integration, Intelligent Iteration” as its theme, which is scheduled to be held from September 27 to 30, 2025. The “Forum of Mathematics and Statistics” hosted by the School of Mathematics and Statistics at Xidian University will be held from September 28, 2025 at Xidian University. The forum aims to gather experts and scholars in mathematics and related fields at home and abroad, build an exchange platform for the development of the discipline, provide guidance on the discipline construction, talent cultivation, education and teaching, and scientific research of the college, and promote the construction of “Double First-Class” disciplines.

ORGANIZER: School of Mathematics and Statistics
TIME: September 28, 2025
VENUE: Room 121, Conference Center, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-08:40	Opening Ceremony	Junzhi Cui	Academy of Mathematics and Systems Science, Chinese Academy of Sciences
08:50-09:30	Robust Estimation of High-Dimensional Linear Regression with Change Points	Zhaojun Wang	Nankai University
09:30-10:10	HPR-LP and HPR-QP: A GPU implementation of HPR for solving linear programming and convex composite quadratic programming	Defeng Sun	The Hong Kong Polytechnic University
10:20-11:00	Nonlinear Output-Feedback Control with Prescribed Performance	Yungang Liu	Shandong University
11:00-11:40	Key Technologies for the Safe Control of Low-Altitude Aerial Vehicle Swarms	Mou Chen	Nanjing University of Aeronautics and Astronautics
11:40-12:20	Continuous Representation-Induced Regularization Methods for Multi-Dimensional Data Recovery	Deyu Meng	Xi'an Jiaotong University

SESSION 13

Advanced Medical Imaging & Intelligent Diagnosis and Treatment

GENERAL CHAIRS



Zhongliang Wang
Xidian University



Yi Zhang
Xidian University

SESSION GUESTS



Zhen Cheng
Shanghai Institute of Materia Medica, Chinese Academy of Sciences



Renjie Chai
Southeast University



Jian Ye
Shanghai Jiaotong University



Jinhui Wu
Nanjing University



Jianhua Ma
Xi'an Jiaotong University



Fang Yang
Southeast University



Haiming Fan
Xi'an Jiaotong University



Jia Geng
West China Hospital, Sichuan University



Yudong Zhang
Southeast University



Han Lv
Beijing Friendship Hospital, Capital Medical University



Shijie Zhao
Northwestern Polytechnical University

SESSION INTRODUCTION

The “Advanced Medical Imaging & Intelligent Diagnosis and Treatment Forum,” with the core theme of “Integration of Medicine and Engineering Development, Innovation Leading the Future,” is dedicated to promoting the deep integration of medicine and engineering technology. It focuses on the most advanced scientific and technological achievements in the field of international interdisciplinary collaboration between medicine and engineering, closely tracking and grasping the latest research dynamics and development trends in the global academic community.

The conference will delve into multiple dimensions including the fundamental connotations of interdisciplinary innovation in advanced medical imaging and intelligent diagnosis and treatment, frontier topics in basic research areas, advantages and collaborative mechanisms among different disciplines, as well as key factors promoting integrated innovation. By gathering top experts and scholars in the field, it aims to build an open and shared exchange platform. Together, they will explore how to achieve efficient linkage among 'industry, academia, research, and medicine,' and investigate effective pathways for promoting the application of cutting-edge technologies in the field of interdisciplinary medicine and engineering, constructing research platforms, fostering high-caliber talent, and converting research outcomes into practical applications, thus advancing the development of new productive forces in the field of life science and health.

ORGANIZER: School of Life Science and Technology
TIME: September 28, 2025
VENUE: Lecture Hall 420, G Building, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:40-09:00	Opening Ceremony		
09:00-09:25	Innovative Research and Clinical Translation of Molecular Probes	Zhen Cheng	Shanghai Institute of Materia Medica, Chinese Academy of Sciences
09:25-09:50	Basic and Clinical Translational Research on Gene Therapy for Hereditary Hearing Loss	Renjie Chai	Southeast University
09:50-10:15	Surface-Enhanced Raman Spectroscopy: A New Tool for Metabolomics Research	Jian Ye	Shanghai Jiaotong University
10:30-10:55	Innovative Micronano Delivery Systems	Jinhui Wu	Nanjing University
10:55-11:20	Intelligent Integrated Recognition and Deep Diagnosis of Colonic Lesions	Yudong Zhang	Southeast University
11:20-11:45	Intelligent Brain Information Processing	Shijie Zhao	Northwestern Polytechnical University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
14:00-14:25	Microbubbles for Precision Diagnosis and Treatment of Thrombosis	Fang Yang	Southeast University
14:25-14:50	Frontier Technologies in Intelligent Medical Imaging and Image Analysis	Jianhua Ma	Xi'an Jiaotong University
15:20-15:55	Research on Enhanced Magnetic Resonance Imaging Based on Ultrasmall Ferrites	Haiming Fan	Northwest Univeristy
15:55-16:20	Nano-pore Single-molecule Multi-omics Medical Sensing	Jia Geng	West China Hospital, Sichuan University
16:20-16:45	New Methods for Brain Health Assessment Driven by Retinal Fundus Features and Clinical Physiological Information	Han Lv	Beijing Friendship Hospital, Capital Medical University

SESSION 14

Intelligent Era and Social Development

GENERAL CHAIR



Lixin Hao
Xidian University

TPC CHAIRS



Jian Chai
Xidian University



Fuqi Shi
Xidian University



Huilin Chen
Xidian University



Jianwei Liu
Xidian University



Pengfei Gao
Xidian University

SESSION INTRODUCTION

The development in information and intelligence serves as the foundational support for promoting global technological innovation and industrial upgrading. Informatization and intelligence are the innovation engines for fostering new-quality productive forces in China; they also constitute the “artery” for propelling high-quality development of scientific and technological innovation in Shaanxi and the construction of Xi'an as a “dual center” . From September 26 to 30, 2025, Xidian University will host the “International Conference on Artificial Intelligence and Information” . In this conference, the Faculty of Humanities and Social Sciences will convene a forum on “The Intelligent Era and Social Development” . With the rapid development of intelligent technologies, artificial intelligence has profoundly influenced and transformed the development of human society. It is essential that we consider how to address the risks and challenges posed by the intelligent revolution and respond to the social development issues of the intelligent era. This forum, focused on the impact of information and intelligence on modern society, will discuss relevant issues including economic and social development, philosophy, language, education and cultural exchange, and highlight forward-looking thinking about social development and the dissemination of humanistic spirit in the era of intelligence. The forum will be grandly held at Xidian University on September 28, 2025. Welcome to attend!

ORGANIZER: Department of Humanities and Social Sciences
TIME: September 28, 2025
VENUE: Room B101, Conference Center, South Campus, Xidian University

TIME	REPORT TITLE	SPEAKER	AFFILIATION
08:30-12:00	The intersection of AI and learning pedagogy: serving two masters	Christopher Hill	Canadian University Dubai
	Generative AI and US-China Race	Jinghan Zeng	City University of Hong Kong
	Enterprise Strategies for the Dynamic Evolution of Artificial Intelligence	Yuan Li	Shanghai Jiao Tong University
	Professional Transformation and Internationalization Trends in the Age of Artificial Intelligence	Jian Chai	Xidian University
	Sustainable Supply Chain Management and the Facilitating Role of Digital Technology	Nelson oly Ndubisi	Southern Cross University
	The Comprehensive Essence of Human Beings and Their New Evolution	Kun Wu	Xi'an Jiaotong University
	Challenges to China's Education in the Age of Intelligence Overlaid with Negative Population Growth	Xia Li	Shanghai Jiao Tong University
	Study on the Construction Mechanism of Ideological Discourse Power in We-Media	Na Liu	Tianjin University
	Gen-AI induced Humanness and Green Purchase Intention – Evidence from Douyin APP	MUHAMMAD HAMZA	Student from Xidian University of Economics and Management

05

THE 10th FORUM FOR HUASHAN SCHOLARS (IFHS 2025)

THE 10th FORUM FOR HUASHAN SCHOLARS(IFHS 2025)

The Forum for HUASHAN Scholars has become a bridge connecting Xidian University with outstanding young scholars worldwide since the first forum was held in 2016, where countless sparks of wisdom collide and countless innovative ideas surge together to promote scientific research in the field of information. Each session is a brave exploration of the academic frontier and a persistent pursuit of scientific research dreams.

As a leading university in the field of electronic information in China, Xidian University has always been committed to cultivating and introducing outstanding talents at all levels around the world. At the 10th Forum for HUASHAN Scholars, we will:

Inspiration and innovation: Expand academic horizons and experience the mutual learning of different academic cultures.

Frontier insight: Grasp the latest trends in the development of disciplines and understand the development trends of future science and technology.

Harmony and win-win: Build partnerships with peers and find strong support for research projects.

Perception of Xidian University: Attach great importance to talents, and build an ideal stage for academic development.

Entering the wave of a new era, Xidian University welcomes global young scholars to participate in the 10th Forum for HUASHAN Scholars, let us work together to build a digital future, contribute wisdom and strength to the construction of a community with a shared future for mankind!

CONFERENCE PROGRAMME OF IFHS 2025

DATE	DETAILED AGENDA
Friday 26 September	Registration and Check-in
Saturday 27 September	ICAI 2025 and Welcome Dinner
Sunday 28 September	Sub-Forum of Relevant Schools and School Visiting
Monday 29 September	Closing & Signing Ceremony

CONFERENCE PROGRAMME OF IFHS 2025

SERIAL NO.	SCHOOLS	DISCIPLINES/RESEARCH DIRECTIONS	CONTACTS	SCHOOLS WEBSITE
1	School of Telecommunications Engineering	Theory and Technology of New Communication Networks Information Transmission Theory and System Multimedia Information Theory Communication-Computing Convergence and Scenario Application Artificial Intelligence and Modern Communication Special Communication and New Network Mechanism Cryptographic Theory and Application Intelligent Covert Communication and Information Processing Transportation Engineering	Mr. Wang (0086)-29-88204184 jfwang@xidian.edu.cn	
2	School of Electronic Engineering	Integrated Circuits and Systems Information Metamaterials for Electronic Systems Antenna and Microwave Technology Information Countermeasure Technology Information Perception and systems Pattern Recognition and Intelligent System Systems Engineering Target Tracking Identification and Information Fusion Multidimensional Signal Design and Processing Radar Imaging Theory and Method Underwater Acoustical Signal Processing Target Detection System, Theory and Method Theory and Application of Intelligent Information Processing Remote Sensing Science and Technology	Ms. Duan (0086)-29-88201703 seehr@xidian.edu.cn	
3	School of Computer Science and Technology	Computer Architecture Data Engineering Computational Bioinformatics Computer Network and Internet of Things Dynamic Intelligent Software Engineering Technology Fundamental Theory of Software Engineering Software Engineering for Industrial Intelligence Software Engineering in Visual Intelligence	Mr. Chen (0086)-29-81891018 longchen@xidian.edu.cn	
4	School of Mechano-Electronic Engineering/ National Scientific Research Platform	Mechatronic Engineering Mechanical Manufacture and Automation Mechanical Design and Theory Control Theory and Control Engineering Detection Technology and Automatic Equipment Engineering Mechanics Measurement Technology and Instrumentation Electric Motor and Electric Apparatus Electro-mechanical Science and Technology Robotics Industrial Design Electronic Packaging Technology Electromechanical Coupling Theory Optimization Design Motion/Process Control Advanced Manufacturing Technology Packaging and Assembly Technology Precision Measurement Technology Antenna and Microwave Technology Electronic Manufacturing Technology	Ms. Liu (0086)-29-88203115 liuziwei@xidian.edu.cn Mr. Zhao (0086)-29-88203040 lmzhao@xidian.edu.cn Ms. Li (0086)-29-88203370 emin@xidian.edu.cn	
5	School of Optoelectronic Engineering	Ultrafast Laser Science Laser Physics and Devices Computational Imaging and Applications Infrared Technology and Systems Optoelectronic Integration and Systems Laser Manufacturing and Sensing Intelligent Vision Engineering	Mr. Li (0086)-29-88202558 soehr@xidian.edu.cn	

SERIAL NO.	SCHOOLS	DISCIPLINES/RESEARCH DIRECTIONS	CONTACTS	SCHOOLS WEBSITE
6	School of Physics	Electromagnetic Physics Information Optics Quantum and Frontier Theoretical Physics Information Materials and Condensed Matter Physics Multiphysics Field and Plasma Physics and related fields	Mr. Xie (0086)-29-88202798 phyhr@xidian.edu.cn	
7	School of Economics and Management	Management Science and Engineering National Economics Industrial Economics Finance Enterprise Management Accounting Technology Economy and Management Information Resource Management	Mr. Luo (0086)-29-81892635 mingluo@xidian.edu.cn	
8	School of Mathematics and Statistics	Applied Mathematics Computing Mathematics Probability Theory and Mathematics Statistics Operational Research and Cybernetics Pure Mathematics Statistics	Mr. Zhang (0086)-29-81892697 xbzhang@xidian.edu.cn	
9	School of Humanities	Philosophy of Science and Technology Marxist philosophy; Ethics Western Philosophy Chinese Philosophy Aesthetics; Logic Comparative Literature and World Literature Theory of Literature and Art Linguistics and Applied Linguistics Modern and Contemporary Chinese Literature Chinese Classical Philology Music Recording (Art, drama, film and television,Electronic music,Solfeggio and ear training)	Ms. Ma (0086)-29-81891388 maj@xidian.edu.cn	
10	School of Foreign Languages	Foreign Linguistics and Applied Linguistic English Language and Literature Japanese Language and Literature Translation International Chinese Language Education French language and literature Area Studies	Ms. Chen (0086)-29-81891027 ylchen@xidian.edu.cn	
11	Faculty of Integrated Circuit	Electronic Science and Technology Integrated Circuit Science and Engineering Microelectronics and Solid State Electronics Compound Semiconductor Materials and Devices Physical Electronics Circuits and Systems Advanced Semiconductor Manufacturing and Process Post-Moore Integrated Devices Semiconductor Device Reliability Green Energy and System Space Radiation Effect Analog and Mixed-Signal Integrated Circuit Design Radio Frequency Integrated Systems Intelligent Sensing Chips System Chips and Integrated Systems EDA Software Integrated Circuit Equipment	Mr. liu (0086)-29-81892596 bwliu@xidian.edu.cn	

SERIAL NO.	SCHOOLS	DISCIPLINES/RESEARCH DIRECTIONS	CONTACTS	SCHOOLS WEBSITE
12	School of Life Science and Technology	Biomedical Engineering Electronic Science and Technology Information and Communication Engineering Control Science and Engineering Detection Technology and Automation Computer Science and Technology Optical Engineering Artificial Intelligence Biology Chemistry Medical Biomaterialsand related fields	Mr. Qin (0086)-29-81891070 qshuai@xidian.edu.cn	
13	School of Aerospace Science and Technology	Space Scientific Instruments and Electromagnetic Testing Spacecraft TT&C (Tracking, Telemetry, and Command) and Information Processing Aerospace Electronic Systems and Testing Technology Space Intelligent Sensing Instruments	Ms. Ye (0086)-29-81891034 kjzp@xidian.edu.cn	
14	School of Advanced Materials and Nanotechnology	Physics Mechanics Chemistry Materials Science and Engineering Materials Science Materials Physics and Chemistry Nanomaterials and Technology Microelectronics Electronic Science and Technology and other related majors	Ms. Deng (0086)-29-81891149 dengyue@xidian.edu.cn	
15	School of Cyber Engineering	Electronic Science and Technology Integrated Circuit Science and Engineering Microelectronics and Solid State Electronics Compound Semiconductor Materials and Devices Physical Electronics Circuits and Systems Advanced Semiconductor Manufacturing and Process Post-Moore Integrated Devices Semiconductor Device Reliability Green Energy and System Space Radiation Effect Analog and Mixed-Signal Integrated Circuit Design Radio Frequency Integrated Systems Intelligent Sensing Chips System Chips and Integrated Systems EDA Software Integrated Circuit Equipment	Mr. Zhao (0086)-29-81891730 hwzhao@xidian.edu.cn	
16	School of Artificial Intelligence	Semantic communication, image processing, computer vision and brain-inspired deep neural networks Compressive sensing and computational imaging Hybrid enhancement of artificial intelligence and brain-computer interfaces Human-computer interaction and applications, multimodal robotics Unmanned systems, intelligent detection and control Artificial intelligence hardware implementation and chip design Brain-inspired computing and deep learning Intelligent interpretation of remote sensing big data Quantum Perception and Intelligent Computing Intelligent analysis of electromagnetic signals Medical imaging analysis and auxiliary diagnosis and treatment Collaborative perception and cognition of unmanned systems	Ms. Tie (0086)-29-81892609 mtie@xidian.edu.cn	
17	School of Marxism	Marxist Theory	Ms. Fu (0086)-29-81891162 yffu@xidian.edu.cn	

SERIAL NO.	SCHOOLS	DISCIPLINES/RESEARCH DIRECTIONS	CONTACTS	SCHOOLS WEBSITE
18	School of Information Mechanics and Sensing Engineering	Mechanics Remote Sensing Science and Technology Information and Communication Engineering Electronic Science and Technology Optics Surveying and Mapping Intelligence Science and Technology Control Science and Engineering and related fields	Ms.Ma (0086)-029-88203283 jjma@xidian.edu.cn	
19	Department of Physical Education	Physical Education and Training	Mr. Tang & Mr. Kong (0086)-29--81891638 pehr@xidian.edu.cn	
20	Guangzhou Institute of Technology	Electronic Science and Technology Information and Communication Engineering Signal and Information Processing Computer Science and Technology Software Engineering AI & Cyber Security Microelectronics and Solid-State Electronics Integrated Circuit Design Mechanical Engineering Control Science and Engineering Optical Engineering Biomedical Engineering Radar and Microwave Antennas Quantum Computation and Quantum Sensor Optical sensing and Optical computing Mechanics Physics	Ms. Li (0086)-29-32030236 xdgyyhr@xidian.edu.cn	
21	Hangzhou Institute of Technology	Electronic Science and Technology Information and Communication Engineering Signal and Information Processing Computer Science and Technology Integrated Circuit and System Microelectronics and Solid State Electronics Antennas and Microwave Technology Remote Sensing Science and Technology Cyberspace Security Mechanical Engineering Optical Engineering Biomedical Engineering Quantum Information Applied Mathematics Control Science and Engineering, Automation, Software Engineering, Artificial Intelligence, Optoelectronic Engineering, Satellite Communications	Ms. Zhu & Mr. Chen (0086)-571-22828354 hzhr@xidian.edu.cn	
22	Academy of Advanced Interdisciplinary Research	Frontier interdisciplinary fields including: Nanoscience, Quantum Information, Flexible Electronics, Intelligent Security, Intelligent Scheduling, Remote Sensing Imaging, Marine Information Engineering,etc.	Ms.Zhu & Ms.Xu (0086)-29-88202705 aair@xidian.edu.cn	

SERIAL NO.	SCHOOLS	DISCIPLINES/RESEARCH DIRECTIONS	CONTACTS	SCHOOLS WEBSITE
23	Institute of Information Sensing	Information and Communication Engineering Electronic Science and Technology Computer Science and Technology Control Science Engineering Mechanical Engineering Physics Mathematics Power Engineering and Engineering Thermophysics	Mr. Zhou & Ms. Han (0086)-29-88202868 iis@xidian.edu.cn	
24	Institute of Mathematics and Interdisciplinary Sciences	Pure Mathematics and Applied Mathematics Probability Theory and Mathematics Statistics Operational Research and Cybernetics Fundamental Theory of Information Science	Mr. Ma (0086)-029-81892630 maxiao@xidian.edu.cn	
25	State Key Laboratory of Integrated Services Networks (ISN)	Theory and Technology of New Communication Networks Information Transmission Theory and System Artificial Intelligence and Modern Communication Multimedia Information Theory Information Theory and Cryptography Cyber Security Communication-Computing Convergence and Scenario Application Special Communication and New Network Mechanism Intelligent Covert Communication and Information Processing Transportation Engineerin Computer System Structure Computer Software and Theory Computer Application Technology	Ms. Jing (0086)-29-88204761 jingyuying@xidian.edu.cn	

Benefits:

- Annual salary from 800,000 RMB, performance and bonus are also available, no limit.
- Overseas experts can be recommended by XDU to apply for HUASHAN High-level Talent Fund on a priority basis.
- XDU will provide sufficient research start-up funds, well-equipped office and laboratory space.
- XDU will provide the XDU's affiliated education service for children from kindergarten to secondary school.
- Other benefits are negotiable.

2. Distinguished Professor

Applicants should:

- (1)Have good potential for innovation and development;
- (2)Have experience in National major scientific research projects;
- (3)Be excellent academic or technical leader who have had good professional influence in their fields;(4)Hold a position equivalent to Associate Professor or above in renowned universities and/or research institutions inside or outside of Mainland China.



HUASHAN HIGH-LEVEL TALENT PROGRAM

1. Leading Professor

Applicants should:

- (1)With innovative and strategic thinking;
- (2)Have achieved outstanding innovations;
- (3)Have undertaken National major scientific research projects, or have achieved outstanding outcomes in the field of talent cultivation;
- (4)Hold a position equivalent to Professor or above in renowned universities and/or research institutions inside or outside of Mainland China.



Benefits:

- Annual salary from 550,000 RMB, during the support period of “Distinguished Young Scholars of the National Natural Science Foundation of China (Overseas)”, the annual salary is not less than 650,000 RMB with Xi'an Headquarters, 750,000 RMB with Guangzhou Research Institute, 1Million RMB during the first three in Hangzhou Research Institute years, 750,000 RMB later ; further more information please contact relevant Schools; performance and bonus are also available, no limit.
- Overseas expert can be recommended by XDU to apply for HUASHAN High-level Talent Fund on a priority basis.
- XDU will provide sufficient research start-up funds, well-equipped office and laboratory space.
- XDU will provide the XDU's affiliated education service for children from kindergarten to secondary school.
- Other benefits are negotiable.

3. Elite Professor / Associate Professor

Applicants should:

Have a solid academic foundation and outstanding achievements among their peers in the research field they are engaged in, with the development potential to become academic leader, or with rich accumulation of engineering practice, able to solve key problems in practical applications, breaking through core technologies and achieving important application results, or be able to realize the transformation or industrialization of achievements.



Benefits:

- Annual salary from 300,000 – 350,000 RMB, performance and bonus are also available.
- XDU will provide sufficient settling-in allowance and research start-up funds.
- Applicants are also provided with monetized housing subsidies.
- XDU will provide the XDU's affiliated education service for children from kindergarten to secondary school.

4. Pre-Associate Professor

Applicants should:

- (1) Have good achievements in relevant academic fields, and can rapidly become the major force in supporting teaching and scientific research work after training, with the potential to become an academic backbone;
- (2) Have got a PhD degree from a world-renowned university;
- (3) Not over 32 years old or with postdoctoral experience are generally not over 35 years old.
- (4) Postdoctoral and other related work experience is preferred.



Benefits:

- Annual salary from 250,000 RMB, performance and bonus are also available.
- XDU will provide sufficient settling-in allowance and research start-up funds.
- Applicants are also provided with monetized housing subsidies.
- XDU will provide the XDU's affiliated education service for children from kindergarten to secondary school.

POSTDOCTORAL

Applicants should:

Have outstanding achievements in relevant academic field and have promising research projects. Note: Doctoral graduates who have obtained their PhD degrees inside or outside of Mainland China for no more than three years, and are generally not over 35 years old.



Benefits:

- Annual salary from 300,000/350,000 RMB with other performance-related pay.
- XDU will provide the XDU's affiliated education service for children from kindergarten to secondary school.

06 SPONSORS

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Atlas 800I A2 推理服务器采用8模组高效推理方式，提供强劲AI 推理能力，在算力、内存带宽和互联能力方面具有优势，可广泛应用于生成式大模型推理，例如智能客服、文案生成、知识沉淀等内容生成类场景。

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- 搭载8颗超强算力的昇腾AI模组，高效加速应用

极致能效比

- 提供0.4 PFLOPS / kW超高能效比，节省运营费用

高速网络带宽

- 8 x 200GE RoCE v2高速接口
- 可提供8路NPU通过HCCS Full mesh互联，双向互联带宽达392 GB/s

应用场景

部署在数据中心机房，使能中心推理

内容生成

智能问答

搜索NLP

内容审核

互联网推荐

智能客服

产品规格

形态	4U AI服务器
NPU	8 x 昇腾910
CPU	4 x 鲲鹏920
内存	32个DDR4内存插槽，最高3200 MT/s 单根内存条容量支持16 / 32 / 64 GB
本地存储	8 x 2.5 SATA+2 x 2.5 NVMe 4 x 2.5 SATA+6 x 2.5 NVMe
RAID支持	支持 RAID 0 / 1 / 10 / 5 / 50 / 6 / 60
网络	8 x 200GE QSFP接口直出，RoCE协议
PCIe接口	最多支持3个PCIe 4.0扩展插槽
电源	4个热插拔2.6 kW电源模块，支持2+2冗余
供电	200 ~ 240V AC 240V DC
散热方式	风冷
风扇	支持8个热拔插风扇模组，支持N+1冗余
工作环境温度	5°C ~ 35°C (41°F ~ 95°F)
结构尺寸	175 mm (高) x 447 mm (宽) x 790 mm (深)

异构计算架构 – CANN

CANN (Compute Architecture for Neural Networks) 是华为针对AI场景推出的异构计算架构，对上支持多种AI框架，对下服务AI处理器与编程，发挥承上启下的关键作用，是提升昇腾AI处理器计算效率的关键平台。同时针对多样化应用场景，提供高效易用的编程接口，支持用户快速构建基于昇腾平台的AI应用和业务。



✔ 架构开放

提供丰富接口类型
兼容主流AI框架

✔ 极致性能

加速大模型并行计算
软硬件协同释放澎湃算力

✔ 极简易用

统一API适配全系硬件
Ascend C提供简易开发体系

CANN

全场景AI框架 – 昇思MindSpore

昇思MindSpore是新一代全场景AI框架，最佳匹配昇腾AI处理器算力，支持端、边、云全场景灵活部署，开创全新的AI编程范式，降低AI开发门槛，旨在实现开发友好、运行高效、部署灵活三大目标，推动人工智能软硬件应用生态繁荣发展。



✓ 全流程极简

模型开发套件“即开即用”
模型调优套件“所见即所得”
第三方支持套件“一键式转换”

✓ 全自动并行

一行代码，串行算法并行化
张量自动切分，最大化并行效率

✓ 全场景协同

全场景自适应部署，跨异构硬件执行
无需模型转换。
端侧轻量学习，模型“私人订制”



昇腾推理引擎 – MindIE

昇腾推理引擎（MindIE）为用户提供高效、快速的深度学习推理解决方案，解决用户和伙伴在模型推理和应用开发，特别是大语言模型（LLM）和文生图类模型（例如Stable Diffusion）在推理技术上面临的技术难度大、开发步骤多的问题，助力用户和伙伴更加快速完成推理应用的开发和部署。



✓ 便捷对接

支持对接第三方生态及昇腾推理服务化组件，实现模型
天级快速部署上线

✓ 极致调优

提供高性能预置模型（LLM、SD）
提供已基于昇腾架构亲和优化的调优代码（算子融合、内存管理等）

✓ 高效压缩

支持权重低比特量化、稀疏等压缩特性
超10倍压缩比，精度损失<0.5%

✓ 快速迁移

支持小时级昇腾训练同构快速转换
提供一站式异构迁移工具链 MindStudio，迁移<2人周



AI软件开发套件 – Mind SDK

凝聚行业成功经验，结合AI最佳实践，提供昇腾AI处理器加速的各类AI软件开发套件(SDK)和极简易用的API，加速高性能AI应用的开发和行业AI应用落地，赋能千行百业。

视频分析SDK
(mxVision)

适用于图像和视频视觉分析应用场景
提供极简易用、高性能API和工具
助力使能IVA应用开发加速

API开发

DVPP图像预处理
CV加速算法
图像视频编解码
模型推理

流程编排

插件库
流程编排与管理

高性能视频分析

轻量化应用开发

丰富的参考设计

检索聚类SDK
(mxIndex)

适用于大规模特征检索聚类应用场景
提供极简易用、高性能API
助力使能各类应用

全量检索

近似检索

属性过滤检索

多批量
index检索

高性能检索算法

大容量特征底库

多样化筛选过滤

智能推荐SDK
(mxRec)

适用于搜索推荐模型训练应用场景
提供极简易用、高性能API
助力完成搜广推模型高效训练

开源模型适配

样本处理加速
特征映射
特征淘汰
自动改图
训练恢复

Embedding多级存储

模型任务易迁移

支持大规模训练

知识增强SDK
(mxRAG)

适用于大语言模型知识增强应用场景
提供快速构建问答系统能力
使能搭建实用可靠平台系统

知识库管理

多模式解析
自定义文档切分

向量
检索
加速

嵌入
模型
优化

轻量化应用开发

知识库灵活管理

高性能向量检索

软件开发套件
Mind SDK

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新华三集团

新华三集团作为数字化及AI解决方案领导者，致力于成为客户业务创新、数字化转型值得信赖的合作伙伴。作为新华光集团旗下的核心企业，新华三通过深度布局“云-网-安-算-存-端”全产业链，拥有计算、存储、网络、5G、安全、终端等全方位的数字化基础设施整体能力，提供云计算、大数据、人工智能、工业互联网、信息安全、智能联接、边缘计算等在内的一站式数字化解决方案，以及端到端的技术服务。

新华三集团深耕教育20余载，依托全面创新的数字化解决方案和服务，构建了全栈智慧教育能力。公司积极探索并实践校企合作与人才培养的新模式，也致力于产学研深度融合，用以加速科学技术成果转化，为数字经济和数字产业发展贡献力量。在行业服务有超过2600所高等院校和科研机构，为40余所院校提供了咨询、顶层规划服务，搭建了400余朵校园云，900+教育城域网、无线城域网，以专业的数字化解决方案推动智慧校园建设及教育数字化转型。

智慧校园顶层规划能力

随着教育数字化转型的深入，如何建设一个在智慧校园整体建设中的“融合数字基础设施”变得至关重要。高校行业中，园区网络就像人类的神经系统一样，触达、链接到校园的每一处，支撑着全校师生的学习、工作、生活，也为高校从“信息化”迈向“数字化”“智能化”的进阶提供着坚实的保障。

智慧校园咨询与顶层规划能力：服务40余所高校经验
Smart campus consulting and top-level planning capabilities: Experience in serving over 40 universities

H3C
新华三集团

摸清家底、找准痛点、经验沉淀、系统设计、科学规划、有序推进
Understand the situation, identify the pain points, draw up a blueprint, design a system, plan scientifically, and advance in an orderly manner

顶层规划方法论
企业知识图谱 (EKG)
TDGAP、信息工程方法论 (SEM)

学校业务全生态
多角色、多场景、多信息、多技术、多终端、构建学校全生态

顶层规划新路径
业务调研、需求分析、顶层规划方案制定、业务方案制定、实施路径规划

顶层规划输出物
融合学校发展现状与顶层规划表
顶层设计、编制一般数据规范、数据建设材料

业务架构
数据架构
应用架构
基础设施
保障架构
项目架构

教师、学生、部门、校领导等多角色
教学、科研、管理、服务等场景
基础设施、数据、平台、业务等多维度
云计算、大数据、物联网AI等多技术
电脑、手机、大屏、平板等多终端

业务调研、需求分析、顶层规划方案制定、业务方案制定、实施路径规划
数据调研、数据治理、数据平台建设、数据安全、数据应用
应用调研、应用设计、应用开发、应用测试、应用部署、应用运维
基础设施调研、基础设施设计、基础设施建设、基础设施运维
保障调研、保障设计、保障建设、保障运维
项目调研、项目设计、项目建设、项目运维

顶层规划输出物
融合学校发展现状与顶层规划表
顶层设计、编制一般数据规范、数据建设材料

新华三教育数字化咨询、顶层规划能力行业领先并形成了品牌效应，已服务于40余所高校
H3C's smart education consulting and top-level planning capabilities are industry-leading and have established a strong brand image. It has served more than 40 universities.

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高速校园网络及物联网建设

高校信息化发展至今，100%的校园已经实现了园区网络的链接，无时无刻的为校内师生提供着有线、无线的连接方式，承载着校园人才培养、科学研究等业务场景。教育数字化转型时代下，更多智慧化、数字化的业务兴起，也对校园园区网络提出了更高的要求。因此，构建“一张”极简融合、精细管控、主动安全、智能运维的泛连接园区网络，是建设智慧校园，实现校园数字化转型的基石。新华三打造了数字化转型驱动下的校园园区网络解决方案，致力于帮助高校客户从建网、用网、看网等业务角度梳理新型智能园区应当如何建设。



科研智算平台建设

新华三的科研智算平台在多元开放的异构算力生态中展现出强大的优势，能够满足不同科研需求，并提供全面的端到端全栈解决方案。通过整合计算、存储、运算、调度和管理等多方面资源，该平台对科研机构和企业提供了强有力的支持。



Geehy 极海微电子股份有限公司
Geehy Microelectronics Inc.

实现自主可控安全加密控制芯片及解决方案供应商

极海微电子股份有限公司(以下简称“极海微”)成立于2004年,隶属于纳思达集团(002180),专注于工业级/车规级微控制器、高性能模拟与混合信号IC及系统级芯片的研发与设计。极海微团队具备20年集成电路设计与嵌入式系统开发经验,在全球范围内拥有六大研发中心。

极海微以“用芯驱动产业创新,持续为客户创造价值”为使命,将技术创新作为发展核心,公司主要为工业、汽车电子、能源以及消费电子等行业提供多平台及场景的可靠芯片产品及解决方案,满足客户在高度集成、精准控制、安全识别及效能提升等创新应用中的多元需求。

20+年
集成电路设计经验

6+亿颗
年出货量

14亿
年营业收入

1200+位
全球员工



工业级微控制器

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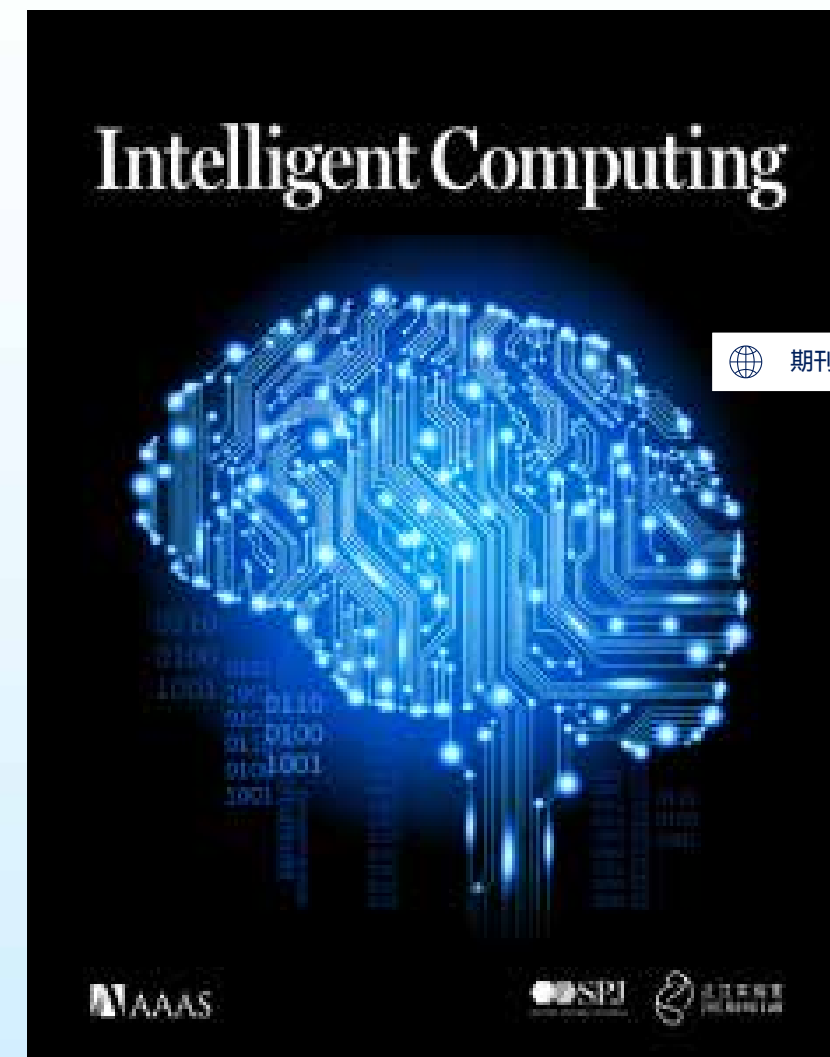
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INTELLIGENT COMPUTING

由之江实验室和美国科学促进会 (AAAS) 共同创办, 是《科学》合作期刊框架 (Science Partner Journal) 中智能计算领域的第一本开放获取 (Open Access) 国际期刊。期刊以「面向人工智能的计算方法, 基于人工智能的计算技术, 基于机器智能、数据、计算的科学发现」为主题, 接收的文章类型涵盖研究论文、综述论文、观点论文、科学数据集/软件论文和评论等。

期刊于2022年创办, 目前期刊已经被ESCI, Scopus, EI, DOAJ收录。影响因子3.7, 位列JCR分区中计算机科学理论方法的Q1区, 计算机科学人工智能Q2区, 计算机科学多学科应用Q2区, 目前期刊投稿免费。



期刊官网 <https://spj.science.org/journal/icomputing>



广州鹿山新材料股份有限公司

成立于 1998 年，是国家火炬计划重点高新技术企业，始终专注绿色环保高性能功能材料领域，2022 年于上海证券交易所主板上市（股票简称：鹿山新材，股票代码：603051）。立足核心材料领域深耕多年，公司当前正紧跟前沿科技趋势，积极配合人形机器人、人工智能产业发展需求，研发一系列关键配套材料，为新兴产业升级提供核心材料支撑。

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研发科技人员

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电子皮肤

电子皮肤是一种可穿戴柔性仿生触觉传感器，融合了柔性电子、微纳传感、生物材料和智能算法等新兴技术，具备多维触觉感知、响应、传输外部刺激等能力。

结构：一般由电极、介电材料、活性材料、柔性基材组成。由活性材料组成的活性功能层将环境刺激转换为可检测的点信号，而介电材料通常作为绝缘/传感层，分布在活性功能层的两侧用于接收和传输电信号，柔性基材则起到承载电子皮肤的同时，确保跟生物皮肤或者其他材料兼容性的作用。



柔性显示

- 固定曲面屏OCA：采用 UV 后固化工艺，解决曲面屏段差填充难题，适配智能设备的曲面显示需求。
- 柔性折叠屏OCA：通过分子结构优化与配方创新，让产品具备“低模量 + 高回弹 + 强粘接”等优势，从根源上减少折叠时的应力集中问题，避免粘接界面失效。

固态电池：

- 固态电解质：开发有机/无机“复合”固态电解质，通过“聚合物分子设计+界面调控+工艺优化”，打造新一代有机/无机杂化固态电解质材料平台，加速固态电池的产业化进程。
- 电芯负极粘接：专用硅基负极PAA粘结剂，具有三维网络结构，改善极片柔顺性，提高电池循环以及倍率保留率，有效解决硅基负极体积膨胀导致的失效问题。
- 铝塑膜复合材料：铝塑膜内层胶，应用于铝箔及聚丙烯薄膜粘接，可适用于干法和热法两种工艺，耐电解液、耐湿热老化，保障密封性并适配电池薄型化。

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主编：郝跃 院士



Special areas of interest include but are not limited to:

- AI-driven communication and networking
- Computer networks and distributed computing
- Computer vision, image processing, and pattern recognition
- Information and intelligence-related chip design
- Intelligent air and space exploration
- Intelligent information sensing and signal processing
- Internet of Things
- Big data
- Block chain
- Machine learning theory and technology
- Security, privacy, and trust for communication, network, data, etc.



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网 站



微信公众号

Engineering

Engineering (IF:10.1) is an international open-access journal that was launched by the Chinese Academy of Engineering (CAE) in 2015. Its aims are to provide a high-level platform where cutting-edge advancements in engineering R&D, current major research outputs, and key achievements can be disseminated and shared; to report progress in engineering science, discuss hot topics, areas of interest, challenges, and prospects in engineering development, and consider human and environmental well-being and ethics in engineering; to encourage engineering breakthroughs and innovations that are of profound economic and social importance, enabling them to reach advanced international standards and to become a new productive force, and thereby changing the world, benefiting humanity, and creating a new future.

The contents of Engineering are based on the disciplines covered by the nine CAE divisions:

- Mechanical and Vehicle Engineering
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- Energy and Mining Engineering
- Civil, Hydraulic, and Architectural Engineering
- Agriculture
- Environment & Light and Textile Industries Engineering
- Medicine and Health
- Engineering Management

News & Highlights—This section covers engineering news from a global perspective and includes updates on engineering issues of high concern;

Views & Comments—This section is aimed at raising academic debates in scientific and engineering community, encouraging people to express new ideas, and providing a platform for the comments on some comprehensive issues;

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西安电子科技大学出版社有限公司

西安电子科技大学出版社成立于 1983 年，是教育部直属的全国重点大学出版社，是国内知名的以出版电子、通信、计算机、机电类教材及科技图书为主的专业出版社，在电子科技出版领域享有较高声誉，多次荣获国家和陕西省的表彰及奖励。西安电子科技大学出版社还获得了“科技名社”的称号，所出版的科技著作得到了科技行业的一致好评。

西安电子科技大学出版社始终坚持为教学科研服务、图书质量第一的办社宗旨，依托本校电子信息学科优势和学术影响，立足西部，深耕全国，积极推动产品和服务创新，出版了以电子信息技术为主的研究生、大中专教材、专著和科技图书近万种，承担了中宣部主题出版项目、国家出版基金项目、国家重点出版物出版规划项目、国家科学技术学术著作出版项目、国家文化产业发展资金项目、教育部全国高校主题出版项目、陕西省出版资金项目、陕西省重大文化精品项目等重大项目70余项。在已出版的各类著作中，《通信网的安全——理论与技术》《天线结构分析、优化与测量》等600多种图书获得国家和省部级奖励，创立了电子信息类专业相关图书著名品牌。

近年来，西电科大出版社积极响应信息化智能化教学发展与变革，正在从出版供应商向知识服务商转变，应用网络信息与新媒体技术，建设数字化教材教学资源服务平台，为广大师生和读者提供教材增值服务，推动出版服务不断创新升级，致力于打造专业科技名社。

西电科大出版社将以团结勤奋、求实创新的工作作风，新颖、优质、实用的图书产品，认真、热诚、高效的服务准则，为广大师生和读者服务，为推动我国高等教育事业的发展，繁荣我国的出版文化事业做出新的贡献！

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计算机系统安全（第 2 版）	微型计算机原理及接口技术（第 2 版）
自动控制原理（第 2 版）	现代通信原理与技术（第 3 版）
移动通信（第 4 版）	机电一体化控制技术与系统
计算机网络（第 3 版）	可编程器件技术原理与开发应用
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