Proceedings

2026 International Conference on Networking and Network Applications

NaNA 2026

August 13-16, 2026

Regency Art Hotel, Macau, China

Technical Sponsors

City University of Macau, China

Xidian University, China

Xi'an University of Posts and Telecommunications, China

Suwa University of Science, Japan

Future University Hakodate, Japan

Chuzhou University, China

Conference Schedule

Date	Time	Conference Program		
2026-8-13	14:00-21:00	Registration at Regency Art Hotel		
	18:30-20:00	Dinner		
2026-8-14	08:30-13:00	Registration at Regency Art Hotel		
	08:30-08:45	Welcome Speech (Norio Shiratori)		
	08:45-09:00	Opening Remarks (Wanlei Zhou)		
	09:00-09:10	Group Photo Taken		
	09:10-10:00	Keynote Speech 1 (Prof. Achille Pattavina)		
	10:00-10:20	Coffee Break		
	10:20-11:10	Keynote Speech 2 (Prof. Hiroshi Inamura)		
	11:10-12:00	Keynote Speech 3 (Prof. Wanlei Zhou)		
	12:00-14:00	Lunch		
	14:00-16:00	Best Paper Candidates Session 1		
	16:00-16:15	Coffee Break		
	16:15-18:20	Best Paper Candidates Session 2		
	18:20-20:30	Gala		
2026-8-15	08:30-10:10	Session A1	Session B1	Session C1
	10:10-10:30	Coffee Break		
	10:30-12:10	Session A2	Session B2	Session C2
	12:10-14:00	Lunch		
	14:30-16:10	Session A3	Session B3	Session C3
	16:10-16:30	Coffee Break		
	16:30-18:10	Session A4	Session B4	Session C4
	18:10-20:00	Dinner		
2026-8-16	08:30-10:10	Session A5	Session B5	Session C5
	10:10-10:30	Coffee Break		
	10:30-12:10	Session A6	Session B6	
	12:10-12:30	Closing Remarks		
	12:30-14:00	Lunch		
	14:30-16:30	TPC Meeting/Free Discussion		

Opening Remarks, Keynote Speeches and Parallel Sessions will all be held at the Ballroom in Regency Art Hotel, with Sessions A1-A6 in Ballroom I, Sessions B1-B6 in Ballroom II and Sessions C1-C5 in Ballroom III.

Greeting Message from General Conference Chairs

It is our pleasure to welcome you all to the 2026 International Conference on Networking and Network Applications (NaNA2026) in Macau, China! We also like to welcome all the eminent speakers and guests from within and outside China and from different walks of life who have come here to share with us their vast knowledge and expertise. We believe that the carefully planned programs of the conference and the amazing city of Macau will offer you all irresistible attractions.

The NaNA2026 is technically sponsored by City University of Macau, China; Xidian University, China; Xi'an University of Posts & Telecommunications, China; Suwa University of Science, Japan; Future University Hakodate, Japan; Chuzhou University, China. At this very moment, we would like to thank the program committees and the organizing staffs for their hard work. We would also like to deliver our appreciation to the keynote speakers for their great contributions to this conference.

This conference aims to gather researchers from different areas and disciplines to present results and participate in discussions under the common themes of Wireless Networks, Wired Networks and Data Center (DC) Networks, Network Management, Monitoring and Automation, Network Applications, AI/ML in Networks and Industrial Control Networks Security. It is expected that the interactions provided by the conference will facilitate a better understanding of the diversity of different approaches as well as of their similarities. In addition, it will open the way for the application of approaches that have been successful in one area to problem solving in other different areas.

Without taking too much of your time, we wish you all successful deliberations, stimulating discussions, and new friendships the conference can offer. We look forward to receiving your contributions to the conference in the future.

NaNA2026 General Co-Chairs
Wanlei Zhou, City University of Macau, China
Bishnu Prasad Gautam, Suwa University of Science, Japan
Jun Liu, Tsinghua University, China
August 14, 2026

Committees

CONFERENCE ORGANIZERS:

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Norio Shiratori, Chuo University/Tohoku University, Japan

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Wanlei Zhou, City University of Macau, China

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Wenjian Liu, City University of Macau, China

Minghao Wang, City University of Macau, China

Track Co-Chairs:

Track 1: Wireless Networks

Gabriel-Miro Muntean, Dublin City University, Ireland

Changqiao Xu, Beijing University of Posts and Telecommunications, China

Chi Zhang, University of Science and Technology of China, China

Haizheng Yu, Xinjiang University, China

Hayato Soya, Suwa University of Science, Japan

Yanagihara Takaaki, Suwa University of Science, Japan

Track 2: Wired Networks and Data Center (DC) Networks

János Tapolcai, Budapest University of Technology and Economics, Hungary

Massimo Tornatore, Politecnico di Milano, Italy

Wei Su, Beijing Jiaotong University, China

Junya Matsuno, Suwa University of Science, Japan

Track 3: Network Management, Monitoring and Automation

Shihyu Chang, San Jose State University, USA

Guilin Chen, Chuzhou University, China

Masaru Fukushi, Yamaguchi University, Japan

Babu Ram Dawadi, Tribhuvan University, Nepal

Javaid Saher, Kanazawa Gakuin University, Japan

Sho Fukaya, Suwa University of Science, Japan

Track 4: Network Applications

Vajirasak Vanijja, King Mongkut's University of Technology Thonburi, Thailand

Xiaojiang Chen, Northwest University, China

Limei Peng, Kyungpook National University, South Korea

Ayong Ye, Fujian Normal University, China

Kazuo Ishii, Suwa University of Science, Japan

Kazuhiko Sato, Muroran Institute of Technology, Japan

Track 5: AI/ML in Networks

Zhuo Ma, Xidian University, China

Bin Yang, Chuzhou University, China

Tetsuyasu Yamada, Suwa University of Science, Japan

Tetsuya Shimamura, Saitama University, Japan

Jieling Wu, Suwa University of Science, Japan

Track 6: Industrial Control Networks Security

Limin Sun, Institute of Information Engineering, Chinese Academy of Sciences, China

Zhiwen Pan, Institute of Information Engineering, Chinese Academy of Sciences, China

Xinghui Zhu, Xidian University, China

Steering Chairs:

Pin-Han Ho, University of Waterloo, Canada

Xiaohong Jiang, Future University Hakodate, Japan

Yulong Shen, Xidian University, China

Advisory Committee:

Achille Pattavina, Politecnico di Milano, Italy

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Tarik Taleb, Oulu University, Finland

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Keynote Speech 1:

Evolution of Data Center Interconnects from Cloudscale Networking to AI Hyperscale Computing

Prof. Achille Pattavina
Politecnico di Milano, Italy

Abstract: Cloud computing has become a reality by the power of distributed data centers (DCs); the bandwidth capacity in these DCs has grown steadily over the past decade driven by new developments in the silicon photonics industry. Progresses achieved in particular in the design and development of optical transmitters and receivers have made it possible a continuous growth of the overall DC interconnect bandwidth, both intra-DC in a single site and inter-DC on a regional scale. The recent exponential growth of interest in all applications of artificial intelligence (AI) has made it clear that an unprecedented request of bandwidth is required not only for interconnecting GPUs/TPUs processors in servers but also for enabling cooperation between servers inside a DC and across different DCs. This is the real challenge to be faced so as to make the widespread usage of more and more powerful LLM AI models a reality. The different solutions developed across the last ten years for the design of optical interconnects in DCs are reviewed showing how the transmission capacity of optical links has scaled up trying to match the growth of DC switching capacity. Emphasis will be given to key design factors, such as modulation formats, pluggable form factors, achievable data rates.

CV: Prof. Achille Pattavina received the Dr. Eng. degree in Electronic Engineering from University La Sapienza of Rome (Italy) in 1977. He was with the same University until 1991, when he moved to "Politecnico di Milano", Milano (Italy), where he has been Full Professor from 1995 to 2024. He has been author/co-author of more than 300 papers in the ICT area published in leading international journals/conferences and of three books: "Switching Theory, Architectures and Performance in Broadband ATM Networks" (John Wiley, 1998), "Communication Networks" (McGraw-Hill, 2nd ed.., 2007, in Italian), "Internet and Computer Networks", (2nd ed. 2020, and in Italian Pearson, 3rd ed., 2022). He has been Editor for Switching Architecture Performance of the Transactions on Communications (IEEE) from 1994 to 2011, Editor for Optical Switching and Networking (Elsevier) from 2004 to 2015, and also Editor-in-Chief of the European Transactions on Telecommunications (AEIT) from 2001 to 2010. He has been PI of national projects and local coordinator of international research activities, including European Union funded projects. His current research interests are in the areas of cloud computing and data centers, green ICT, switching theory.

Keynote Speech 2:

Availability Challenges in Large-Scale Network Systems

Prof. Hiroshi Inamura
Future University Hakodate, Japan

Abstract: Recently, a decline in GitHub's service level has been observed due to increased load and an increase in heterogeneous traffic not included in the operational plan. The proliferation of AI agents and the introduction of numerous IoT devices have led to the scaling up of infrastructure, which is creating new availability challenges that exceed traditional design assumptions. In the GitHub case, traffic from autonomous AI far exceeded initial plans, and the tightly coupled structure caused a chain reaction of failures, degrading the service level. It has been reported that a shift to "Availability First" and a redesign of the system through loose coupling are being implemented. As a countermeasure, returning to architecture design and decoupling overloaded elements is being suggested. This presentation will introduce the topic of network overload due to unintended coupling, which I have researched to date. I have examined risks unique to large-scale systems, such as synchronous interference where harmless applications unexpectedly interact. I hope this will be useful for the design of IoT systems that are expected to scale up in the future.

CV: Hiroshi Inamura is a professor of School of Systems Information Science, Future University Hakodate, since 2016. His current research interests include mobile computing, system software for smart devices, IoT network and their security. He was an executive research engineer in NTT docomo, Inc. He received B.E., M.E. and D.E. degree in Keio University, Japan. He is a member of IEICE, ACM and IEEE, a fellow of IPSJ.

Keynote Speech 3:

Compatibility between Ethics and Security for Large Language Models

Prof. Wanlei Zhou
City University of Macau, China

Abstract: As a major technological breakthrough in the field of artificial intelligence, large language models have become a core force driving technological industry transformation and innovation today. However, the widespread use of large language models also brings with it a series of information security and ethical risks. On the one hand, attackers can exploit model vulnerabilities to extract sensitive data and manipulate output results, posing systemic security threats. On the other hand, data discrepancies and algorithmic flaws can cause models to intentionally or unintentionally generate biased or offensive content, leading to potential ethical risks. While secure and ethical large language models are a common aspiration in academia and industry, existing large language models face significant challenges in achieving these ethical and safety goals. Our work addresses the above challenges to simultaneously address both safety and ethical risks in real-world applications. In this presentation, I will introduce our recent work in building a large language model training framework based on ethical and safety assessments, designing a dynamic balance solution between ethics and safety, and proposing rigorous proof methods for both ethics and safety.

CV: Prof. Wanlei Zhou is currently the Vice Rector (Academic Affairs), City University of Macau, Macao SAR, China. He received the B.Eng and M.Eng degrees from Harbin Institute of Technology, Harbin, China in 1982 and 1984, respectively, and the PhD degree from The Australian National University, Canberra, Australia, in 1991, all in Computer Science and Engineering. He also received a DSc degree (a higher Doctorate degree) from Deakin University in 2002. Before joining City University of Macau, Professor Zhou held various positions including the Head of School of Computer Science in University of Technology Sydney, Australia, the Alfred Deakin Professor, Chair of Information Technology, Associate Dean, and Head of School of Information Technology in Deakin University, Australia. Professor Zhou also served as a lecturer in University of Electronic Science and Technology of China, a system programmer in HP at Massachusetts, USA; a lecturer in Monash University, Melbourne, Australia; and a lecturer in National University of Singapore, Singapore. His main research interests include security, privacy, and distributed computing. Professor Zhou has published more than 500 papers in refereed international journals and refereed international conferences proceedings, including many articles in IEEE transactions and journals. Prof Zhou is an IEEE Life Fellow and is recognised in Stanford's Top 2% Scientists.

Opening Remarks and Keynotes

2026-8-14 8:30-12:00			
Time	**Conference Program**	**Spokesman**	**Chairman**
08:30-08:45	Welcome Speech	Norio Shiratori	Tianqing Zhu
08:45-09:00	Opening Remarks	Wanlei Zhou	Tianqing Zhu
09:00-09:10	Group Photo Taken		Tianqing Zhu
09:10-10:00	Keynote Speech 1	Achille Pattavina	Bishnu Prasad Gautam
10:00-10:20	Coffee Break		
10:20-11:10	Keynote Speech 2	Hiroshi Inamura	Xiaohong Jiang
11:10-12:00	Keynote Speech 3	Wanlei Zhou	Yulong Shen

The Tencent conference is used for online participation, the relevant information is shown in the following table.
Beijing Time (UTC+8)

Time	Conference Theme	Conference ID	Conference Password
2026.8.14 08:30-12:00	**Opening Remarks and Keynote Speech**	32623853674	895612
2026.8.14 14:00-18:20	**Best Paper Candidates Session**	32623853674	895612
2026.8.15-2026.8.16 08:30-18:10	**Session A1-A6**	32623853674	895612
2026.8.15-2026.8.16 08:30-18:10	**Session B1-B6**	458268170	895612
2026.8.15-2026.8.16 08:30-18:10	**Session C1-C5**	90836852315	895612

Track 1:Wireless Networks

2026-8-14 14:00-16:00(Beijing Time) Ballroom				
Session BPC1 Chair:Yanping Chen Vice-chairs:Dawei Wei and Kaifang Yang				
ID	**Time**	**Author**	**Title**	**Type**
4677	14:00-14:25	Ke Cheng, Guangze Xu, Kaili Liu, Yuheng Xia, Peizhuo Lv, Xutong Mu, and Lele Zheng	CryptForge: A Knowledge-Graph-Enhanced Multi-Agent Framework for Automated Cryptographic Engineering	Best Paper Candidate
3789	14:25-14:50	Jiale Li, Zeben Yang, Yihui Zhou and Laifeng Lu	Cryptanalysis of Cyclic Shift Block Ciphers in Noisy Environment	Best Paper Candidate
1720	14:50-15:15	Jianing Wang, Yuanyu Zhang, Shuangrui Zhao, Yulong Shen, and Xiaohong Jiang	Exploiting Doppler Frequency Shift and Jamming for Covert Physical Layer Authentication in LEO Satellite Networks	Best Paper Candidate
7187	15:15-15:35	Shahnila Rahim, Xiao Kong and Limei Peng	AI-Native UAV-Assisted 6G Networks with Federated Mobility Prediction and Graph-Based Multi-Agent Control	Best Paper Candidate
1081	15:35-16:00	Adhyadesh Dahal, Arbashu Dhakal, Bishal Panta, Babu R. Dawadi and Bishnu Prasad Gautam	CDD O-RAN: Causal Discovery-Driven Model-Based Planning for xApp Conflict Mitigation in O-RAN	Best Paper Candidate
16:00-16:15 Coffee Break				
2026-8-14 16:15-18:20(Beijing Time) Ballroom				
Session BPC2 Chair:Laifeng Lu Vice-chairs:Xiaolan Liu and Qingyang Zhang				
ID	**Time**	**Author**	**Title**	**Type**
3668	16:15-16:40	Qingyang Zhang, Dehao Pan, Fengqun Wang, Haofeng He, Wuquan Wen and Hong Zhong	VECrowd: C-V2X enabled Vehicular Edge Crowdsourcing Platform	Best Paper Candidate
3287	16:40-17:05	Jiaxing Cheng, Wei Dong, Yuyan Sun, Yunze Zhao, Zhi Feng, Heng Zhang, Ming Zhou and Limin Sun	Control-guided Fuzzing for Exploring PLC Web Vulnerabilities Affecting Physical Control	Best Paper Candidate
3858	17:05-17:30	Junye Guo, Zhan Xie, Wanning Bao and Liangmin Wang	PH-ABSEL: Attribute-Based Searchable Encryption with Policy Hiding from Lattices	Best Paper Candidate
1312	17:30-17:55	Na Cao, Ruixiang Fan, Chang Yan, Dawei Wei, Yuanyu Zhang, Rixuan Qiu and Ning Xi	Bridging MAC and PHY: A Real-Time Cross-Layer Authentication Architecture for WiFi Networks	Best Paper Candidate
1849	17:55-18:20	Xinhong Hei, Tong Yang, Yibin Ma, Yichuan Wang and Yu Han	Intent Revision: A Semantic-Enhanced Method for Network Situation Prediction	Best Paper Candidate

2026-8-15 8:30-10:10(Beijing Time) Ballroom I				
Session A1 Chair: Jianrui Chen Vice-chairs: Jun Yan and Ke Cheng				
ID	**Time**	**Author**	**Title**	**Type**
7310	8:30-8:50	Jiale Feng, Yanping Chen, Cong Gao and Wei Zhong	Multi-Relay Covert Communication in Industrial IoT with Independent and Collaborative Adversaries	Regular Paper
8674	8:50-9:10	Jiadong Shi, Chunyu Duan, Hao Lei and Liangmin Wang	Real-CATS: A Practical Training Ground for Emerging Research on Cryptocurrency Cybercrime Detection	Regular Paper
0023	9:10-9:30	Zhongmin Wang, Mingjie Liang, Chen Lu, Xiaomin Jin, Yanping Chen and Yu Bai	Spatio-Temporal Graph Convolution and Cross-Attention for High-Precision Coordinate Mapping in Industrial Internet GUI Automated Testing	Regular Paper
2511	9:30-9:50	Shuo Chen, Rui Li, Ancheng Shi and Pinchang Zhang	Reconfigurable Intelligent Surface Assisted Proactive Eavesdropping Attack for MISO Communications	Regular Paper
3157	9:50-10:10	Rui Li, Pinchang Zhang and Shuo Chen	Experimental Investigation of AoA-Assisted VMD-Based Radar Specific Emitter Identification	Regular Paper
10:10-10:30 Coffee Break				
2026-8-15 10:30-12:10(Beijing Time) Ballroom I				
Session A2 Chair:Huihui Wu Vice-chairs:Chan Gao and Sibo Wang				
ID	**Time**	**Author**	**Title**	**Type**
3365	10:30-10:50	Sibo Wang, Bin Yang and Xiaohong Jiang	Joint Channel and Noise Uncertainty for Proactive Eavesdropping	Regular Paper
3823	10:50-11:10	Chan Gao, Surui Liu, Lin Guo and Baodong Qin	Energy-Efficient Covert Task Offloading in UAV-Assisted MEC Systems	Regular Paper
5396	11:10-11:30	Lijie Zheng, Yixu Li, Shuqiang Huang, Xinghui Zhu and Ji He	A FDRL-Based Resource Allocation Scheme for Secure Communication in the DHNs	Regular Paper
1034	11:30-11:50	Shaoyang Zhu, Xiao Han, Luyuan Yang, Hangbin Hu, Zihan Guo, Yukai Sun and Changqiao Xu	An Agent-Oriented Multimodal Backend System for Continuous AR Interaction in Medication Assistance: Temporal Fusion and Graceful Degradation	Regular Paper
8341	11:50-12:10	Zihao Yan, Yi Lu, Hongning Li, Jiawei Zhang, Zhiyuan Deng and Mingxu Fan	Multi-Scale Distortion Quantification and Causal Attribution for AIGC-Augmented Remote Sensing Object Detection	Regular Paper

Track 2: Wired Networks and Data Center (DC) Networks

2026-8-15 8:30-10:10(Beijing Time) Ballroom II				
Session B1 Chair:Dan Luo Vice-chairs:Xun Chu and Yi Tian				
ID	**Time**	**Author**	**Title**	**Type**
0794	8:30-8:50	Dan Luo, Yinshan Zhao, Zhaoyi Jin, Xun Chu, Chang Xu, Xiaowen Zhu, Yue Zhang, Zixun Ji and Yuekai Yang	Image Denoising Algorithm based on Wavelet Transform and Partial Differential Equations	Regular Paper
0898	8:50-9:10	Xun Chu, Dan Luo, Zhaoyi Jin, Guozhu Zhao, Liang Dong, Jiang Sun, Xingqiang Xu, Yena Lu, Chunlai Hao, Xinlei Wang and Yuxian Xiao	Boosting SimCLR with 3D Attention and Adaptive Loss for Contrastive Learning	Regular Paper
6540	9:10-9:30	Chuangchuang Gao, Sugang Ma, Chuanwang Han and Yanping Chen	SFFTrack: Transformer Visual Tracking with Spatio-Temporal Feature Fusion	Regular Paper
1948	9:30-9:50	Yixu Li, Lijie Zheng, Chengshan Zhou, Ji He and Xiaohong Jiang	Access Anomaly Detection in IoVs with Dual-log Enabled LCM-Net	Regular Paper
2889	9:50-10:10	Yang Lei, Yichen Wu, Chenjing Yan, Zhan Yang, Meng Qiu, Qingfeng Jiang and Gaofei Sun	Indoor Plant Watering Pattern Recognition Integrating Multi-Dimensional Feature Boundaries and Local Gaussian Mixture Models	Regular Paper
10:10-10:30 Coffee Break				
2026-8-15 10:30-12:10(Beijing Time) Ballroom II				
Session B2 Chair:Xun Chu Vice-chairs:Guanyu Chen and Zhaoyi Jin				
ID	**Time**	**Author**	**Title**	**Type**
3762	10:30-10:50	Hafiz Bilal Ahmad, Gao Haichang and Naila Latif	Causal Multimodal Deep-kNN Fusion for Anomaly Detection in Heterogeneous IoT Systems	Regular Paper
4197	10:50-11:10	Jinping Li, Zhao Huang, Xiao Liu, Dong Ding, Yanping Chen, Zhixue Wang and Xiaozhen Cheng	A Quantum Game-Theoretic Analysis of Block Withholding Attacks in Symmetric Dual Mining Pools	Regular Paper
8169	11:10-11:30	Guanyu Chen, Hiroki Watanabe, Kohei Matsumura and Yoshinari Takegawa	Context-Aware Identity Verification for Canine Wearable IMU Streams in Edge-IoT Systems	Regular Paper
9037	11:30-11:50	Xinhao Deng, Kaifang Yang, Xuemin Chao and Yanchao Gong	Text-Content-Aware Binarization for Text Screen Content Images	Regular Paper
9621	11:50-12:10	Dan Luo, Zhaoyi Jin, Xun Chu, Qi Qi, Junjun Wang, Zixun Ji, Qiyou Du, Yipeng Chang and Yuekai Yang	Research and Analysis of Image Data Acquisition based on Big Data OCR Recognition Algorithm	Regular Paper

Track 3: Network Management, Monitoring and Automation

2026-8-15 8:30-10:10(Beijing Time) Ballroom Ⅲ				
Session C1 Chair:Ranran Sun Vice-chairs:Meiyun Xie and Zhao Huang				
ID	**Time**	**Author**	**Title**	**Type**
0079	8:30-8:50	Qiuyu Mou, Xiaoyan Zhu, Jiawei Zhang, Yanbo Yang, Teng Li and Jianfeng Ma	Compression and Pruning-Resistant Watermarking for Federated Learning Models in Distributed Environments	Regular Paper
0229	8:50-9:10	Yiting Sun, Xuening Liao, Xueli He, Zhenqiang Wu, Xiaoyong Zhang	SSA-Net: Semantic-Structure Alignment Network Framework for Intelligence Educational Diagnosis	Regular Paper
0588	9:10-9:30	Qing Ye, Xiaoyu Cui, Yichuan Wang and Xi Zuo	A Multimodal Device Fingerprinting Method Based on the Fusion of Behavioral Temporal Patterns and Stable	Regular Paper
0640	9:30-9:50	Rongcheng Liu, Xiaofang Wang and Pengfei Lu	An Attribute-Based Encryption and Provable Data Possession Scheme for Data Sharing in IoV	Regular Paper
0652	9:50-10:10	Ming Li and Tao Xue	TRiM-KG: A Temporal Memory Knowledge Graph for Network Management Reasoning in LLM Agents	Regular Paper
10:10-10:30(Beijing Time) Coffee Break				
2026-8-15 10:30-12:10(Beijing Time) Ballroom Ⅲ				
Session C2 Chair:Meiyun Xie Vice-chairs:Ranran Sun and Yuzheng Li				
ID	**Time**	**Author**	**Title**	**Type**
0760	10:30-10:50	Sheng Huang	MAF-YOLO: Gated Depth Fusion and Sparse Attention for RGB-D Mobility Aid Detection	Regular Paper
0827	10:50-11:10	Shuan Li, Xiangliang Ma, Zhihao Chen, Zan Zhou, Shujie Yang, Bo Wang and Ziwei Li	Attribute Inference Attack in Cross-Domain Federated Learning via Multi-Layer Model Sensitivity Analysis	Regular Paper
0907	11:10-11:30	Yongshuai Wang, Yaowei Duan,Yichuan Wang, Ruinan Peng and Huigui Yan	MSRE-GRU: Multi-Scale Rényi Entropy and GRU-Based Temporal Model for Malicious Traffic Detection	Regular Paper
1790	11:30-11:50	Yuzheng Li, Shujie Yang, Jiaxin Sun, Sizhe Huang, Zan Zhou and Changqiao Xu	Beyond High Entropy: AMI-Guided Traffic Feature Dimensionality Reduction with Applications to Power Grid Edge Networks	Regular Paper
2021	11:50-12:10	Shuhan Zhao and Yongzhen Li	Research on the Application of Single Block Hash function in Merkle Tree	Regular Paper

Track 4: Network Applications

2026-8-15 14:30-16:10(Beijing Time) Ballroom I				
Session A3 Chair: Jieling Wu Vice-chairs:Jiaqing Bai and He Zhu				
ID	**Time**	**Author**	**Title**	**Type**
1787	14:30-14:50	Zisen Ye, Yingyu Chen, Yuzi Wang, Guiyuan Tang, Zhiwei Zhang and Ning Xi	MineTS: Robust Cryptomining Traffic Detection Based on Temporal-Statistical Learning	Regular Paper
4448	14:50-15:10	Suxing Wang, Chan Gao, Bingbing Xiao and Qianyao Qiang	Performance Analysis and Optimization of Covert Communications Under UAV Surveillance	Regular Paper
4736	15:10-15:30	Zhen Liu, Faqi Zhao, Guoqiao Zhou, Peize Li and Wen Wang	SecReasoner: Latent Security Reasoning for Encrypted Malicious Traffic Detection and Explainability	Regular Paper
4922	15:30-15:50	Jieling Wu, Kazuo Ishii, Bishnu Prasad Gautam	MedDrone-Vis:Communication-Aware BVLOS Route Assessment for UAV Medical Delivery in Mountainous Regions	Regular Paper
5875	15:50-16:10	Wanjia Zheng, Dawei Wei, Ning Xi and Pengbin Feng	TEE-Secured Distributed Asynchronous Advantage Actor-Critic Algorithm	Regular Paper
16:10-16:30 Coffee Break				
2026-8-15 16:30-18:10(Beijing Time) Ballroom I				
Session A4 Chair:Xuening Liao Vice-chairs:He Zhu and Wu Wang				
ID	**Time**	**Author**	**Title**	**Type**
7141	16:30-16:50	He Zhu, Wencai He, Wenhao Zhang and Pinchang Zhang	Covert Performance in RIS-Assisted Multi-Antenna Systems	Regular Paper
8566	16:50-17:10	Xuejin Wang, Yige Zhu, Siyao Zhang and Jianrui Chen	A Fast Neuro-Symbolic Regression Method for Cognitive Diagnosis	Regular Paper
7979	17:10-17:30	Xuyang Zhao, Lingfeng Lu and Pinchang Zhang	Semi-Blind Asynchronous Tag-Based Physical-Layer Authentication with Multi-Block Average Calibration	Regular Paper
8215	17:30-17:50	Jiaqing Bai and Zhen Jia	Characterizing and Forecasting Network Latency with perfSONAR: A Case Study at RIKEN	Regular Paper
9737	17:50-18:10	Fengqun Wang, Shang Xie, Qingyang Zhang, Xirui Zhao, Mingwei Zeng and Jie Cui	Key Aggregation-Based Distributed Data Sharing for Multi-Cloud Scenarios in IIoT	Regular Paper

Track 5: AI/ML in Networks

2026-8-15 14:30-16:10(Beijing Time) Ballroom II				
Session B3 Chair: Lele Zheng Vice-chairs: Pengfei Xu and Cuijuan Shang				
ID	**Time**	**Author**	**Title**	**Type**
9692	14:30-14:50	Hongwei Lin, Xinhua Cui, Huanhuan Xu, Xinyu Zhang and Lin Xie	CLSA: A Lightweight Anonymous Authenticated Key Agreement for Secure Edge Intelligence	Regular Paper
0050	14:50-15:10	Xuanmin Hu, Ruiyang Xiao, Chi Zhang and Lingbo Wei	Risk-Aware Anomaly Detection in Cryptocurrency Transaction Networks	Regular Paper
1025	15:10-15:30	Rui Zhang and Cuijuan Shang	An LLM-Based Caregiving Path Planning Method Incorporating Node-Level Safety Constraints via MCTS	Regular Paper
2099	15:30-15:50	Pengfei Xu, Yinjie Jia, Minghui Liu and Al Shariar Shakhor	Adaptive User Selection and Weighted Fusion for Cooperative Broadband Spectrum Sensing in 5G Networks Based on Compressed Sensing	Regular Paper
2759	15:50-16:10	Bhagawan Rokaha and Bishnu Prasad Gautam	WildGuard-Robo: A Real-time Multi-agent Perception and Understanding Framework for Wildlife Deterrence	Regular Paper
16:10-16:30 Coffee Break				
2026-8-15 16:30-17:30(Beijing Time) Ballroom II				
Session B4 Chair: David Kanel Vice-chairs: Xinzhe Pi and Pengfei Xu				
ID	**Time**	**Author**	**Title**	**Type**
2804	16:30-16:50	Xue Dong, Xiaochen Zhang, Mengfan Xu, Bin Luo, Jingxuan Zhang and Jin Li	Privacy-Preserving Image Description via Structured Scene Representation and Layout Captioning	Regular Paper
5988	16:50-17:10	Haoxiang Zhang, Xueli Geng, Pengyuan Wang, Qianxing Li, Zhaoxiang Yan and Xutong Mu	JIT-Forget: Just-In-Time Directed Forgetting for Long-Horizon LLM Agents	Regular Paper
6221	17:10-17:30	David Kanel and Bishnu Prasad Gautam	MinuteWork: An Intent-to-Compute Agentic Workflow Orchestration System Based on the GLadME Development Framework	Regular Paper

2026-8-15 14:30-16:10(Beijing Time) Ballroom Ⅲ				
Session C3 Chair: Yan Liu Vice-chairs: Xin Guo and Jin Li				
ID	**Time**	**Author**	**Title**	**Type**
2078	14:30-14:50	Yiming Fu, Wei Su, Bin Yang and Alex Hou	Deep Reinforcement Learning for User Reconnection in Software-Defined Large-Scale LEO Satellite Networks	Regular Paper
2092	14:50-15:10	Lifeng Guo and Hongyu Wang	Attribute-Based Fully Homomorphic Encryption with Linear Secret Sharing Structure on Cloud	Regular Paper
2284	15:10-15:30	Xun Gan, Yulong Zhao and Bingbing Li	WiFi-PLA: Privacy Leakage Attack and Countermeasures via Through-Wall WiFi Sensing	Regular Paper
2374	15:30-15:50	Zuqiang Zhou, Shenghui Zhao, Tao Tao and Zijie Liu	SGNet: Dual-Branch Echo Cancellation with Similarity-Guided Interaction	Regular Paper
3105	15:50-16:10	Yuhang Jia, Jiaming Gong, Zhuwei Jiang and Jianrui Chen	A Hypergraph-Mamba Framework for Multimodal Sentiment Analysis	Regular Paper
16:10-16:30 Coffee Break				
2026-8-15 16:30-18:10(Beijing Time) Ballroom Ⅲ				
Session C4 Chair:Xin Guo Vice-chairs: Yan Liu and Chan Gao				
ID	**Time**	**Author**	**Title**	**Type**
3406	16:30-16:50	Xiaohui Li，Zhihong Liu and Yong Zeng	Robust Semantic Steganography via Large Language Models	Regular Paper
3662	16:50-17:10	Yichao Gao, Shujie Yang and Changqiao Xu	Semantic-Aware Web Crawler Detection via Heterogeneous Parameter Embedding and Referer-Topology Learning	Regular Paper
4089	17:10-17:30	Xueting Cai, Wei Duan, Miaowen Wen, Jun Li and Guoan Zhang	A Prompt-Engineered Iterative Framework for Resource Allocation in HRIS	Regular Paper
4306	17:30-17:50	Liangliang Yin, Xinhong Hei, Yichuan Wang, Xiaoxue Liu and Jiaxin Li	A Multi Carrier Covert Communication Framework for Live Streaming Bullet Comments	Regular Paper
4310	17:50-18:10	Shengchao Li，Zhengyu Cui，Hanfei Sun，Qiang Fu，Gaolin Zhu，Weidong Yang，and Xiaofei Zhang	A Simulation-Based Study on Voltage Control of Microgrids Under False Data Injection Attacks	Regular Paper

Track 6: Industrial Control Networks Security

2026-8-16 8:30-10:10(Beijing Time) Ballroom I				
Session A5 Chair:Zewei Guo Vice-chairs:Yu Bai and Xiaoteng Yang				
ID	**Time**	**Author**	**Title**	**Type**
4541	8:30-8:50	Yichuan Wang, Yuanchen Zhao, Xin Song, Yibin Ma and Hao Pang	FR-TKNet: A Lightweight Framework for Network Security Situation Prediction via Multi-scale Frequency Decoupling and KAN	Regular Paper
4605	8:50-9:10	Jiaming Wang, Ranran Sun, Yanchun Zuo, Fengqi Tong, Weidong Yang and Fugui Yan	Generative Adversarial Network-Based Covert Communication with Non-Gaussian Noise	Regular Paper
5217	9:10-9:30	Xiaobin Lu, Xiaoyu Wang and Guanghui Wang	MRQK:A Multidimensional Range Query System based on Keyword Classification	Regular Paper
5266	9:30-9:50	Cheng Zhang, Yueyue Zhao and Chao Qi	Research on the Design of an Experimental Teaching Platform Based on GitLab	Regular Paper
5311	9:50-10:10	Huanhuan Zhao, Chenxi Yang, Renzhi Ji, Jingxian Shen, Chun Cao, Mengyuan Zhang，Yaxin Wang and Wenjuan Zhao	A Dual-Layer Multimodal Biometric Authentication Framework for UAV Operator Verification	Regular Paper
10:10-10:30(Beijing Time) Coffee Break				
2026-8-16 10:30-12:10(Beijing Time) Ballroom I				
Session A6 Chair: Xiaoteng Yang Vice-chairs:Zewei Guo and Yanchao Gong				
ID	**Time**	**Author**	**Title**	**Type**
5440	10:30-10:50	Xu Tao, HaiBao Chen, Yan Xu, Bin Yang, Shikai Shen and Jun He	Resource Allocation for Covert Transmission in a UAV-Assisted Integrated Sensing, Computing and Communication System	Regular Paper
5548	10:50-11:10	Meiting Zhou, Liumei Zhang and Jiaxi Li	faFIFO: Feasibility-Aware Scheduling with FIFO-Compatible Bias for Mixed Security Event Streams	Regular Paper
6354	11:10-11:30	Lifeng Guo, Runtao Zhang and Zhiwei Li	Fine-Grained Controllable Blockchain Rewriting with Attribute Revocation and Policy Hiding	Regular Paper
6394	11:30-11:50	Danni Yan, Jiangong Yang, Zhengqiang Wu and Xiaoyong Zhang	Graph-based Semantic Diagnosis and Progressive Dialogue Framework for Programming Education	Regular Paper
6606	11:50-12:10	Xiangtao Meng, Yihua Peng and Huihui Wu	Fast In-Process Recovery Mechanism for Regional Faults in LEO Satellite Networks	Regular Paper

2026-8-16 8:30-10:10(Beijing Time) Ballroom II				
Session B5 Chair:Guozhu Zhao Vice-chairs: Boyang Deng and Sugang Ma				
ID	**Time**	**Author**	**Title**	**Type**
6619	8:30-8:50	Xinyuan Ji, Liu Bo, Zhibo Zhao, Xiaoyong Zhang	Personalized Instructional Content Generation Framework Based on Path-Guided Planning and Token-Constrained LLMs	Regular Paper
6653	8:50-9:10	Qi Cheng, Xuening Liao, Haowen Wang, Junxian Lu and Qiqi Zhang	Effect of Stragglers on Federated Learning: An Experimental Perspective	Regular Paper
6683	9:10-9:30	Guozhu Zhao, Jiasheng He, Guangyu Wang, Zeyu Yan, Zixian Du and Qicheng Wang	Passive User Authentication Utilizing Screen-Touch Trajectory for Unmanned Aerial Vehicle Systems	Regular Paper
6738	9:30-9:50	Guozhu Zhao, Guangyu Wang, Jiasheng He, Xu Han, Mengyu Li and Wei Zhang	Multi-Dimensional Deepfake Detection Framework via Adaptive Fusion of Facial, Environmental, and Temporal Features	Regular Paper
7061	9:50-10:10	Xun Gan, Yulong Zhao, Wenkai Wu and Bingbing Li	DARE-SQL: Knowledge Retrieval-based Dynamic Few-shot Adaptation and Semantic-Syntactic Consistency Verification for Text-to-SQL	Regular Paper
10:10-10:30(Beijing Time) Coffee Break				
2026-8-16 10:30-12:10(Beijing Time) Ballroom II				
Session B6 Chair: Boyang Deng Vice-chairs:Guozhu Zhao and Lingbo Wei				
ID	**Time**	**Author**	**Title**	**Type**
7333	10:30-10:50	Junjie Chen, Li Li, Xinlan Xu and Fei Hao	A Dual Graph Contrastive Learning Approach for Recommendation System	Regular Paper
7464	10:50-11:10	Xinyuan Wu, Dongbo Han and Zhicheng Wei	Segment Anything Model 2 Guided Multi-scale Underwater Salient Instance Segmentation	Regular Paper
8327	11:10-11:30	Runhao Fu, Yuao Zhang, Hong Zhong and Guilin Chen	Improving Compositional Text-to-Image Generation via Skill-Aware Synthetic Curriculum	Regular Paper
8507	11:30-11:50	Xingyu Ping, Bin Yang, Bao Gui, Xinzhe Pi, Shikai Shen and Jun He	Covert Rate Maximization for Satellite-Terrestrial Integrated MEC with Energy Harvesting	Regular Paper
8888	11:50-12:10	Xufeng Niu, Jiaxin Li, Litao Qiao, Yichuan Wang and Liangliang Yin	AFS: Adaptive Feature Selection Intrusion Detection Framework for Scarce Samples	Regular Paper

2026-8-16 8:30-9:50(Beijing Time) Ballroom Ⅲ				
Session C5 Chair:Yu Zhang Vice-chairs:Yiming Fu and Xu Zhao				
ID	**Time**	**Author**	**Title**	**Type**
9246	8:30-8:50	Xiaoxue Liu, Xinke Ru, Yichuan Wang, Dian Zhang and Litao Qiao	A Flexible and Scalable Method for Multidimensional Comprehensive Path Evaluation of Botnets	Regular Paper
9524	8:50-9:10	Yuzhe He, Yichuan Wang, Yeqiu Xiao, Yu Han and Yibin Ma	An SDN-Driven Game-Theoretic Framework for Adaptive Multi-Stage Decoy Defense Systems	Regular Paper
9844	9:10-9:30	Weilin Zhu, Yichuan Wang, Xiaoxue Liu, Yanhua Feng and Ziyuan Liu	Network System Self-Healing Based on Nowhere-Zero Flow and the Minimal-Circuit Theorem	Regular Paper
9988	9:30-9:50	Xueliang Wang, Hongbin Zhang, Yuelin Liu，Lianlian Xing and Feng Lin	Dual-View APT Attack Detection Based on Provenance Graphs	Regular Paper

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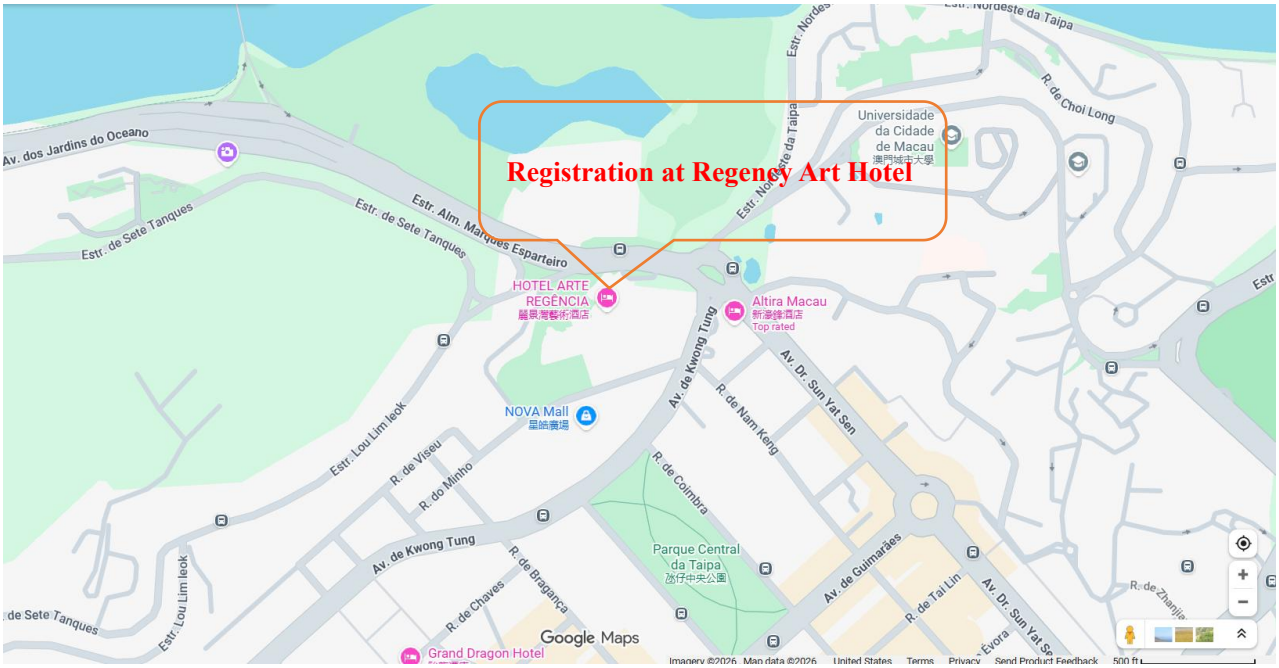

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