



NGDN 2025

第七届下一代数据驱动网络国际学术会议

The 7th International Conference on Next Generation Data-driven Networks

Agenda

Date: June 7, 2025 (Saturday)

Main Session: 国际学术交流中心-2楼-香悦轩报告厅

Zoom ID: 865 4065 8480 Password: 250607

Time	Activity
08:30-09:00	Registration
09:00-09:05	Opening Ceremony Chair: Assoc. Prof. Xiaoshi Song, Northeastern University, China
09:05-09:10	Welcome Speech Prof. Tie Qiu, Northeastern University, China Prof. Liang Zhao, Shenyang Aerospace University, China
09:10-09:15	Photography
09:15-09:45	Keynote Speech I (Chair: Prof. Yanfeng Zhang, Northeastern University, China) Prof. Xiang-Yang Li, IEEE Fellow, ACM Fellow University of Science and Technology of China, China Title: Collaborative Optimization in Multi-Level Networks of Industrial Intelligent Agents
09:45-10:15	Keynote Speech II (Chair: Prof. Xiaobo Zhou, Tianjin University, China) Prof. Yan Zhang, IEEE Fellow, IET Fellow Member of Academia Europaea, University of Oslo, Norway Title: AI for Digital Twin
10:15-10:30	Tea Break
10:30-11:00	Keynote Speech III (Chair: Prof. Meng Zheng, Northeastern University, China) Prof. Guihai Chen, IEEE Fellow, CCF Fellow Shanghai Jiao Tong University, China Title: Self-Evolutionary Heterogeneous-Converged Edge Intelligence Computing
11:00-11:30	Keynote Speech IV (Chair: Prof. Liang Zhao, Shenyang Aerospace University, China) Prof. Lei Ren National Science Fund for Distinguished Young Scholars Beihang University, China Title: Industrial Internet of Things: Towards AI 3.0
11:30-12:00	Keynote Speech V (Chair: Prof. Linlin Ding, Liaoning University, China) Prof. Chen Tian National Science Fund for Distinguished Young Scholars Nanjing University, China Title: Congestion Management in/beyond Datacenter Networks: Pyrrha as a case
12:00-14:00	Lunch Break



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Session I: 国际学术交流中心-2楼-香悦轩报告厅

Time	Activity
Chair:	<p>物联网与大数据学者论坛</p> <p>Prof. Xiaobo Zhou, Tianjin University, China</p> <p>Assoc. Prof. Songwei Zhang, Northeastern University, China</p>
14:00-14:25	<p>Invited Speech</p> <p>Prof. Tian Wang, Beijing Normal University, China</p> <p>Title: Edge Intelligence and Its Industrial Empowerment Cases</p>
14:25-14:50	<p>Invited Speech</p> <p>Prof. Wei Dong, Zhejiang University, China</p> <p>Title: Large Models Empower IoT: Technology and Vision</p>
14:50-15:15	<p>Invited Speech</p> <p>Assoc. Prof. Chenren Xu, Peking University, China</p> <p>Title: Highly Reliable Integrated Sensing-Communication Mobile IoT Technology</p>
15:15-15:40	<p>Invited Speech</p> <p>Prof. Ruiyun Yu, Northeastern University, China</p> <p>Title: Data-driven Large Model Technology for Surface Anomaly Detection of Integrated Circuits</p>
15:40-15:50	Tea Break
15:50-16:15	<p>Invited Speech</p> <p>Prof. Huan Zhou, Northwestern Polytechnical University, China</p> <p>Title: Efficient Cloud-Edge-Device Collaborative Federated Learning Methodology</p>
16:15-16:40	<p>Invited Speech</p> <p>Prof. Fusang Zhang, Institute of Software Chinese Academy of Sciences, China</p> <p>Title: Creating "Wireless" Possibilities: New Opportunities in Ubiquitous Wireless Sensing</p>
16:40-17:05	<p>Invited Speech</p> <p>Prof. Yanfeng Zhang, Northeastern University, China</p> <p>Title: Accelerating Graph Machine Learning Training and Inference on Ascend NPUs</p>



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Time	Activity
Chair:	物联网与大数据学者论坛 Prof. Xiaobo Zhou, Tianjin University, China Assoc. Prof. Songwei Zhang, Northeastern University, China
17:05-17:35	Poster Presentation
17:05-17:15	Xiaochen Huang Title: Efficient Evaluation Method For Topology Robustness Driven By Network Multi-Feature Fusion
17:15-17:25	Beicheng Luo Title: Check-in User Operation Scene Recognition Based on Deep Temporal Perception Network
17:25-17:35	Zhengbin Jiao Title: Modeling and Analysis of Collaborative Vision-Based Environment Perception in Vehicular Networks with Visual Blockage
17:35-17:45	Zhenhao Sun Title: Research on central air conditioning demand response optimization based on DDPG
17:45-17:55	Geng Sun Title: Collaborative Ground-Space Communications via Evolutionary Multi-objective Deep Reinforcement Learning
17:55-18:05	Xvmeng Lv Title: Fuzzy Cluster-Based Multi-Node Charging Strategy in MSN
18:05-18:15	Kaile Xiao Title: Data Collaboration and Task Offloading Strategies for Edge-Vehicle Networks Based on DQN
18:15-18:25	Hongfei Xu Title: A Review of Heterogeneous Network Convergence Technology and Development Trends
18:25-18:30	Award
18:30-18:35	Closing Ceremony



Agenda

Date: June 7, 2025 (Saturday)

Session II: 国际学术交流中心-4楼-405会议室

Zoom ID: 865 4065 8480 Password: 250607

Time	Activity
Oral Presentation	
Chair: Assoc. Prof. Bingxian Lu, Northeastern University, China	
14:00-14:10	Liuyan Tian Title: Public Transportation Demand Prediction Based on Adaptive Graph Convolutional Recurrent Network
14:10-14:20	Ting Han Title: Dynamic Spatio-Temporal Graph Convolutional Network for Traffic Flow Prediction with Knowledge Representation
14:20-14:30	Xiaolong Yang Title: Distributed State Estimation over Sensor Networks with Sensor Resolution under Binary Encoding Scheme
14:30-14:40	Xiaowen Fan Title: Secure and Efficient Distributed Matrix Multiplication Based on Polynomial Coding
14:40-14:50	Yunfeng Zhang Title: PriWildMatch: Privacy-Preserving Flexible Wildcard Pattern Matching In The Cloud
14:50-15:00	Zongmin Wang Title: Malware Classification and Detection in Untrusted
15:00-15:10	Haoyan Huang Title: Committee Consensus-based Auditable Privacy-preserving Multi-round Federated Learning Aggregation
15:10-15:20	Yangchengqiu Zhao Title: Robot Path Planning Integrating the Improved JPS Algorithm and the DWA Algorithm
15:20-15:30	Zhengtian Li Title: Efficient Hierarchical Multi-cloud Power Sharing Data Integrity Auditing Scheme Based on Blockchain
15:30-15:50	Tea Break



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Oral Presentation	
15:50-16:00	Zhuohua Duan Title: SAPENet: Structure-Aware Pose Estimation with Attention and Skeletal Constraints
16:10-16:20	Chengcheng Li Title: Fault Diagnosis and Model Learning for Hybrid Dynamic Systems with Incomplete Models
16:20-16:30	Weijie Chen Title: A Lightweight Splitted Federated Learning Algorithm for Financial Crime Detection
16:30-16:40	Wenwen Li Title: Drilling loss circulation prediction method based on Hippopotamus algorithm to optimize hyperparameters
16:40-16:50	Xiangyu Kong Title: KDTC: A Lightweight Traffic Classification Method Based on Knowledge Distillation
16:50-17:00	Award
17:00-17:10	Closing Ceremony