

Paper ID	Title	Topic	Time and Meeting Room	Session Chair
Day1 - November 14th, 2025 (Friday)				
335	License-Aware Task Clustering and Adaptive DAG Restructuring for EDA Scheduling on Hybrid Cloud	Cloud Scheduling, Optimization & Prediction	Meeting Room 2 (First Floor of Library) 2:00PM - 5:30PM	Haihan Duan
21	SurvGAN: Generative Survival Analysis for Predictive Maintenance in Cloud Data Centers	Cloud Scheduling, Optimization & Prediction		
39	ML-CLEKS: Module Lattice based Certificateless Encryption with Keyword Search in Cloud Storage	Cloud Scheduling, Optimization & Prediction		
51	Providing Optimal Optical Proximity Correction Cloud Services for the Semiconductor Industry	Cloud Scheduling, Optimization & Prediction		
63	A Data-Driven End-Effector Position Control Model for a Two-Segment Continuum Robot	Cloud Scheduling, Optimization & Prediction		
137	IntelligentCRM: A Data-Driven CRM System with Integrated Credit Evaluation and Churn Prediction	Cloud Scheduling, Optimization & Prediction		
187	Enhancing VLMs for Satellite Remote Sensing Image Analysis via Contrastive Decoding	Cloud Scheduling, Optimization & Prediction		
196	SMamDiff: Spatial Mamba for Stochastic Human Motion Prediction	Cloud Scheduling, Optimization & Prediction		
209	AI-Driven Cloud Optimization: Enhancing Cost Prediction, Resource Scheduling and Fault Resilience in Cloud Environments	Cloud Scheduling, Optimization & Prediction		
301	Sparse Manifold Retrieval Network for ICESat-2 Photon Point Cloud Denoising	Cloud Scheduling, Optimization & Prediction		
372	Carbon-Aware Scheduling and Distributionally Robust Optimization for Cloud Systems	Cloud Scheduling, Optimization & Prediction		
58	Joint Client Selection and Gradient Optimization for Energy-Efficient Federated Learning in Mobile Edge Computing Networks	Federated & Energy-Efficient Edge Learning	Meeting Room 3 (715 of Library) 2:00PM - 5:30PM	Runhao Zeng
68	An All-Reduce Compatible Top-K Compressor for Communication-Efficient Distributed Learning	Federated & Energy-Efficient Edge Learning		
120	File Systems' Impact on SSD Performance and Energy Efficiency	Federated & Energy-Efficient Edge Learning		
155	Temporal- α Coverage: Cost-Efficient and Accurate Failure Detection in Data Center Networks	Federated & Energy-Efficient Edge Learning		
158	MIN-LENS: Joint Moment Inference and Surrogate Modeling for Microservice Performance Prediction	Federated & Energy-Efficient Edge Learning		
194	A Two-Stage Resource Transfer Architecture in Edge Computing Power Network for Artificial Intelligence	Federated & Energy-Efficient Edge Learning		
204	InkeMPL: Diving into the System Design of Mobile Personal Livestreaming	Federated & Energy-Efficient Edge Learning		
208	Energy Efficient and QoS-Aware Model Selection for DNN Inference in Edge Intelligence	Federated & Energy-Efficient Edge Learning		
213	FedFM: A Federated Flow-Based Generative Model for Rainy Traffic Scenes	Federated & Energy-Efficient Edge Learning		
355	GreenContinuum: A Formal Model of a Smart Grid-Aware Edge-Cloud Continuum for Carbon and Energy Management	Federated & Energy-Efficient Edge Learning		
356	EMixer: Reinforced Ensemble Learning for Energy Consumption Prediction	Federated & Energy-Efficient Edge Learning		
375	Greedy Low-Rank Gradient Compression Provably Converge for Distributed Learning	Federated & Energy-Efficient Edge Learning		
Day2 - November 15th, 2025 (Saturday)				
41	Personalized Real-Time Epileptic Seizure Alert on Edge Devices via Few-Shot Meta-Learning	Emotion Recognition & Edge-Cloud Fusion Application		
44	Cloud-Edge EEG Emotion Recognition under Communication Constraints: Accuracy-Efficiency Trade-offs and Transmission Optimization	Emotion Recognition & Edge-Cloud Fusion Application		

64	Grasping Force Perception of a Tip-Sensor-Free Surgical Manipulator based on MLP Neural Network	Emotion Recognition & Edge-Cloud Fusion Application	Meeting Room 1 (9th Floor of Library) 10:15AM - 12:30AM	Cong Zhang
109	Implementing Bayesian Optimization-Driven Machine Learning Algorithms for Algorithmic Decision-Making in Quantitative Stock Trading	Emotion Recognition & Edge-Cloud Fusion Application		
131	AIRhealth: An AIoT AR-Glasses Framework for Multimodal Dietary Recognition and Personalized Nutrition Management	Emotion Recognition & Edge-Cloud Fusion Application		
176	Edge--Cloud Audio-Visual Emotion Recognition with Transformer Fusion and ELM Classification	Emotion Recognition & Edge-Cloud Fusion Application		
183	An Efficient CNN-Transformer Architecture for Facial Expression Recognition in Cloud-Edge Systems	Emotion Recognition & Edge-Cloud Fusion Application		
192	An Intelligent Fabric-Based Sensing Platform for Real-Time Gait and Posture Monitoring in E-Health	Emotion Recognition & Edge-Cloud Fusion Application		
211	Self-Learning Agentic AI Cloud Platforms for Dynamic Enterprise Process Automation	Emotion Recognition & Edge-Cloud Fusion Application		
359	A Federated Diffusion Framework for Privacy-Preserving Sleep Monitoring in Cloud-Edge Environments	Emotion Recognition & Edge-Cloud Fusion Application		
4	Agentless, Secure Onboarding & Compliance Scanning in AWS Environments	5G, AI Security & Network Signaling	Meeting Room 3 (715 of Library) 10:15AM - 12:30AM	Feng Liang
18	Reliable Digital Image Authentication Using DNPLSB based Watermarking for Tampering Detection in Facial Images	5G, AI Security & Network Signaling		
67	An AI Security Testbed for the 5G Core	5G, AI Security & Network Signaling		
82	The Design and Development of an AI-empowered Anti-cheating System	5G, AI Security & Network Signaling		
95	ModelMap: Kernel-Level Zero-Copy On-Demand Model Loading for Edge AI	5G, AI Security & Network Signaling		
116	Trust-based Reputation Model for IoT Attack Detection	5G, AI Security & Network Signaling		
312	Session-Feature-Based Signaling Flow Reassembly for 5G Core Networks	5G, AI Security & Network Signaling		
327	5G Core Network Anomaly Signaling Flow Analysis Based on Fuzzy Clustering and Association Mining	5G, AI Security & Network Signaling		
368	A Threat-Oriented Study of API Security Challenges in CI/CD Pipelines	5G, AI Security & Network Signaling		
20	Secure Kubernetes Workload Deployment with Automated Enforcement of Cluster-Defined Policies	Cloud Infrastructure & Secure Deployment	Meeting Room 1 (9th Floor of Library) 2:00PM - 5:30PM	Yanjie Dong
29	Monitoring Pace Scheduler	Cloud Infrastructure & Secure Deployment		
77	Low-Latency SFC Deployment in MEC Based on Dynamic Load and Label Expansion	Cloud Infrastructure & Secure Deployment		
78	The Twilight of SGX, but Not its Tests: An In-Depth Study of Testing in SGX Projects	Cloud Infrastructure & Secure Deployment		
80	Stagewise Feedback for RIS-Aided Sensing and Covert Backscatter Communication	Cloud Infrastructure & Secure Deployment		
89	Dynamic Characteristics Analysis of H40 CNC Machine Tool Workbench	Cloud Infrastructure & Secure Deployment		
97	MIDAS: Adaptive Proxy Middleware for Mitigating Metadata Hotspots in HPC I/O at Scale	Cloud Infrastructure & Secure Deployment		
133	Wireless Biosensing at Exceptional Points	Cloud Infrastructure & Secure Deployment		
247	IaaS Capacity Planning with Multiple Pricing Models Using Predictive Heuristics	Cloud Infrastructure & Secure Deployment		
361	AI-Driven Workload Migration Framework for Multi-Cluster Environments	Cloud Infrastructure & Secure Deployment		
362	Container Orchestration Impact on SPIFFE Identity Artifacts: A Performance Analysis of Docker vs Kubernetes	Cloud Infrastructure & Secure Deployment		

35	Joint Beam Coverage Control and Task Offloading for MEC-Enabled LEO Satellite Networks	Smart IoT, Digital Twin & Task Offloading	Meeting Room 3 (715 of Library) 2:00PM - 5:30PM	Jia Zhao
69	A Digital Twins-Enhanced Robust Task Offloading Method Based on DRL for Smart Factories	Smart IoT, Digital Twin & Task Offloading		
70	Risk-Aware DRL-Based Computation Offloading for Edge-Enabled Smart Ports	Smart IoT, Digital Twin & Task Offloading		
93	Non-Cooperative UWB Base Station Position Estimation Method in Indoor Environments	Smart IoT, Digital Twin & Task Offloading		
94	Smart Pigeonhole Smartphone Storage System for Classrooms	Smart IoT, Digital Twin & Task Offloading		
118	Trust Based Digital Twin Behavioural Categorisation in a Collaborative Ecosystem	Smart IoT, Digital Twin & Task Offloading		
186	Overcoming the Glass Barrier: A Metasurface Solution for Robust IoT Connectivity in Modern Buildings	Smart IoT, Digital Twin & Task Offloading		
336	Hybrid Reactive Autoscaling for Task-Based Pipelines on Kubernetes	Smart IoT, Digital Twin & Task Offloading		
350	Battery Deformation Measurement Based on Electronic Speckle Pattern Interferometry	Smart IoT, Digital Twin & Task Offloading		
354	NeRF-KAN: An Efficient 3D Reconstruction Method for Neural Radiance Fields Based on Kolmogorov-Arnold Networks	Smart IoT, Digital Twin & Task Offloading		
374	Research on QoS-oriented Load Balancing in LEO-IoT Based on Network Calculus	Smart IoT, Digital Twin & Task Offloading		
Day 3 – November 16th, 2025 (Sunday)				
11	Dual-Objective Parallel Task Scheduling in Cloud Computing via Proximal Policy Optimization: Cutting Latency and Energy in Production-Sc	UAV, Resource Allocation & Optimization	Meeting Room 4 (802 of Library) 10:15AM - 12:30AM	Quanquan Liu
32	Optimizing Cloud Deployment: Blending of IaaS and FaaS for Microservice Architecture	UAV, Resource Allocation & Optimization		
60	Pose Control of a Multi-segment Soft Continuum Robot based on HR-DP Algorithm	UAV, Resource Allocation & Optimization		
75	Local-Observation Intelligent Cooperative Resource Scheduling via Deep Reinforcement Learning in Interference Environments	UAV, Resource Allocation & Optimization		
76	RIS-Assisted MEC: Joint Offloading and Resource Optimization with Hybrid Evolutionary Algorithm in Urban Environments	UAV, Resource Allocation & Optimization		
85	Cooperative UAV Deployment and Resource Allocation in Multi-UAV Networks: A Hybrid Genetic–SandCat Algorithm	UAV, Resource Allocation & Optimization		
86	UAV Communication Relay Path Planning Based on Lightweight Deep Neural Network	UAV, Resource Allocation & Optimization		
91	Multi-Mode Task-Oriented Semantic Communication for Cooperative Perception in IoT Networks	UAV, Resource Allocation & Optimization		
135	A Virtualisation Resource Allocation and Provisioning Workflow	UAV, Resource Allocation & Optimization		
138	A Cloud-Edge Collaborative Framework for Autonomous UAV-based Medical Logistics	UAV, Resource Allocation & Optimization		
202	Resource Management Scheme of NB-IoT in LEO Satellit Networks Based on AoI	UAV, Resource Allocation & Optimization		
313	FaLSE: A Failure and Latency-aware Scheduling for Mission-critical Applications at the Edge	UAV, Resource Allocation & Optimization		
12	Systematic Evaluation of Preprocessing Strategies for IDS in Imbalanced Cloud Traffic	LLM, Frameworks & Cloud-Native AI		
16	A Self-Supervised and Multi-Task Learning Framework for Human Emotion Motion Recognition and Generation	LLM, Frameworks & Cloud-Native AI		
114	System-Aware LLM Arena: Benchmarking Utility, Latency, and Cost	LLM, Frameworks & Cloud-Native AI		
124	Between Generation and Judgment: A Cloud-Native Framework for Adversarial Evaluation of LLM Alignment	LLM, Frameworks & Cloud-Native AI		

132	QER: Quantized Low-rank Error Reconstructor for LLM Low-bitwidth Quantization	LLM, Frameworks & Cloud-Native AI	Meeting Room 3 (715 of Library) 10:15AM - 12:30AM	Chengming Li
178	CloudAtion: A Functional Programming Framework for Cloud-Native Container Resource Management	LLM, Frameworks & Cloud-Native AI		
180	A Lightweight Framework for Adaptive VisionModel Inference across Edge and Cloud Devices	LLM, Frameworks & Cloud-Native AI		
188	LAFA: Agentic LLM-Driven Federated Analytics over Decentralized Data Sources	LLM, Frameworks & Cloud-Native AI		
214	SemanticPrefetcher: Accelerate Data Lake Access with Semantics-Aware File Prefetching	LLM, Frameworks & Cloud-Native AI		
344	All Seeing Eyes: A Native-Resolution Vision-Language Framework for High-Fidelity Remote Sensing Image Understanding	LLM, Frameworks & Cloud-Native AI		
360	Securing Cloud-Native Applications via Infrastructure as Code and DevOps	LLM, Frameworks & Cloud-Native AI		