

Saturday, Dec. 6: Edge Computing for Connected and Autonomous Vehicles (EdgeCAV)

Each paper is allocated a 20-minute slot (15 minutes presentation + 5 minutes Q&A).

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| 9:00-10:00 | Registration |
| | Keynote Dr. Xiaopeng (Shaw) Li (University of Wisconsin-Madison) |
| 10:00-10:40 | Talk title: Automated/Connected Vehicle Evaluation and Management with Edge Computing Session Chair: Sidi Lu |
| 10:40-11:00 | Break |
| | Session 1A: Perception and Trajectory Forecasting for Autonomous Driving Session Chair: Ruimin Ke |
| | 1. <i>TinyBEV: Compact Temporal Fusion for Multi-View 3D Perception</i> Hongyu Ke, Jack Morris (Georgia State University); Yongkang Liu, Satoshi Kitai, Kentaro Oguchi (InfoTech Labs, Toyota Motor North America R&D); Yi Ding, Haoxin Wang (Georgia State University) |
| 11:00-12:30 (10-min buffer) | 2. <i>Communication-aware Diffusion Models for Multi-Agent Trajectory Forecasting in Connected and Autonomous Vehicles</i> Jingyi He, Kehua Chen, Bingzhang Wang, Yinhai Wang (University of Washington) |
| | 3. <i>Context-Aware Perception: VLM-Augmented All-Weather Detection for Autonomous Driving</i> Johora Akter Polin (William & Mary); Yichen Luo (William & Mary); Sidi Lu (William & Mary) |
| | 4. <i>Open-Vocabulary Object Detection with Driving-Aware Multi-Scale Feature Fusion for Autonomous Driving</i> |

Tianyang Chen, Yongtao Yao (University of Delaware); H Peter Hofstee (IBM); Weisong Shi (University of Delaware)

12:30-13:30

Lunch

Session 1B: Trustworthy Edge Intelligence for Connected Vehicles

Session Chair: Johora Akter Polin

5. *Toward Design of a Scalable Federated Unlearning Framework for Trustworthy Edge Intelligence*

Haitham Y. Adarbah (Department of Electrical Engineering and Computer Science, Texas A&M University–Kingsville, Kingsville TX, USA); Kewei Sha (Department of Data Sciences, University of North Texas, Denton TX, USA); Afzel Noore (Department of Electrical Engineering and Computer Science, Texas A&M University–Kingsville, Kingsville TX, USA)

6. *A Cost-Aware Hierarchical Cascade for Anomaly Detection at the Edge in Connected Vehicles*

Cheng-Hsun Chang (Department of Computer Science, KTH Royal Institute of Technology, Stockholm, Sweden); Adarsh Prasad Behera (Department of Intelligent Systems, KTH Royal Institute of Technology, Stockholm, Sweden); Sophia Zhang Pettersson (Cloud and Embedded Platform, Traton AB, Södertälje, Sweden); James Gross (Department of Intelligent Systems, KTH Royal Institute of Technology, Stockholm, Sweden)

7. *Training-Free Late Fusion across Geometry and BEV for Edge-Deployable LiDAR–Camera 3D Perception*

Yixuan Zhang, Sidi Lu (William & Mary, USA)

8. *Adaptive Edge Intelligence for Intersection Safety: Real-Time Dilemma Zone Management via DV-EISOS*

Luyang Gong, Hung-Min Hsu, Wei Sun (AIWayision Inc.); Yinhai Wang (University of Washington)

9. *Onboard Decisions and Cloud-Scale LLM Planning: Split Reasoning and Collaborative Intelligence for Autonomous Driving*

Meng Ma, Shuyang Li, Kaicong Huang, Talha Azfar (Rensselaer Polytechnic

**13:30-16:00
(10-min buffer)**

Institute); Naigang Wang (IBM T.J. Watson Research Center); Ruimin Ke (Rensselaer Polytechnic Institute)

10. *Edge-Deployable LLMs for Autonomous Vehicle Intelligence*

Ishparsh Uprety, Xinghui Zhao (Washington State University)

11. *Evaluating the Impact of Network Latency on the Teleoperation of Autonomous Vehicles*

Mustafa Alsolami (University of Jeddah); Arpan Bhattacharjee, Weisong Shi (University of Delaware)