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| **7:30 – 8:15** | **Breakfast** |
| **8:15 – 8:30** | **Open Remarks: General chairs and TPC chairs**<br><br>o   Junshan Zhang, University of California at Davis<br>o   Weisong Shi, University of Delaware<br>o   Oleg Gusikhin, Ford Motor Company |
| **8:30 – 9:30** | **Keynote Speech 1:** Always Fresh Cockpit Experience through Connectivity, Cloud and Edge<br>**Speaker:** Vishnu Sundaram, SVP of Cockpit and Connected Services at Stellantis<br>**Session Chair:** Weisong Shi |
| **9:30 – 9:45** | **Coffee Break** |
| **9:45 – 11:15** | **Conference Session I (90 minutes) – AI-enabled mobility technologies**<br>**Session Chair: Song Fu**<br><br>**Sniffer Faster R-CNN: A Joint Camera-Lidar Object Detection Framework with Proposal Refinement**<br>Sudip Dhakal, Qi Chen, Deyuan Qu, Dominic Carrillo, Qing Yang, Song Fu<br>University of North Texas<br><br>**FLOW: A Scalable Multi-Model Federated Learning Framework on the Wheels**<br>Yongtao Yao, University of Delaware<br>Nejib Ammar, Toyota InfoTech<br>Weisong Shi, University of Delaware<br><br>**RAMRL: Augmented Multimodal Reinforcement Learning for Robust On-Ramp**<br>Merging Gaurav Bagwe, Michigan Technological University<br>Xiaoyong Yuan, Michigan Technological University<br>Xianhao Chen, University of Hong Kong<br>Lan Zhang, Michigan Technological University |
| **11:30 – 13:00** | **Lunch and Break** |

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| **13:00 – 14:30** | **Panel: Mobility: Challenges and Opportunities**<br><br>**Moderator:**<br>Weisong Shi, University of Delaware<br><br>**Panelists:**<br>○ Sushanta Das, Technical Director, American Center for Mobility<br>○ Wende Zhang, Director, ADAS Sensing and Localization SW<br>○ Cal Coplai, Staff Technical Program Manager, Cavnue<br>○ Kristin Slanina, Chief Innovation Officer at ParkMyFleet<br>○ Luke Harvey, Principal Partner Solution Architect at AWS |
| **14:30 – 14:45** | **Coffee Break** |
| **14:45 – 16:15** | **Conference Session II (90 minutes) – Indoor Mobility**<br>**Session Chair: Zheng Dong**<br><br>**FollowMe: A Robust Framework for the Guidance of Sensorless Indoor Mobile Robots**<br>Sanjith Udupa, Novi High School<br>Liangkai Liu, Wayne State University<br>Weisong Shi, University of Delaware<br><br>**DC-HEN: A Deadline-aware and Congestion-relieved Hierarchical Emergency Navigation Algorithm for Ship Indoor Environments**<br>Xiaoling Zeng, Kezhong Liu, Yuting Ma, Mozi Chen<br>School of Navigation, Wuhan University of Technology<br><br>**m-BMC: Exploration of Magnetic Field Measurements for Indoor Positioning Using mini-Batch Magnetometer Calibration**<br>Hamaad Rafique, Davide Patti, Maurizio Palesi, Vincenzo Catania<br>University of Catania |
| **16:15 – 16:30** | **Coffee Break** |

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| **16:30 – 18:00** | **Conference Session III (90 minutes) – Real-time Mobility**<br>**Session Chair: Sidi Lu**<br><br>**Real-Time Vehicle Localization Using Steering Angle in Urban Cities**<br>Raef Abdallah, Wayne State University<br>Baofu Wu, Hangzhou Dianzi University<br>Jian Wan, Hangzhou Dianzi University<br><br>**Modeling and Property Analysis of the Message Synchronization Policy in ROS**<br>Ruoxiang LI, Cityu University of Hong Kong<br>Zheng Dong, Wayne State University<br>Jen-Ming Wu, Hon Hai Research Institute<br>Chun Jason Xue, City University of Hong Kong<br>Nan Guan, City University of Hong Kong<br><br>**Conservative Estimation of Perception Relevance of Dynamic Objects for Safe Trajectories in Automotive Scenarios**<br>Ken Mori, Technische Universität Darmstadt<br>Kai Storms, Technische Universität Darmstadt<br>Steven Peters, Technische Universität Darmstadt |
| **18:00 – 19:00** | **Reception** |
| **19:00 – 20:00** | **Award Ceremony** |

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| **7:30 – 8:30** | **Breakfast** |
| **8:30 – 9:30** | **Keynote Speech 2: Enabling the journey of the software-defined vehicle – from development to mass deployment**<br>**Speaker:** Robert Day, Director of Arm's Automotive Go-to-Market activities for North America<br>**Session Chair:** Weisong Shi |
| **9:30 – 9:45** | **Coffee Break** |
| **9:45 – 11:15** | **Conference Session IV (90 minutes) – Mobility as a service**<br>**Session Chair: Kewei Sha**<br><br>**Autonomous Shuttle Integrated in a Communication and Sensing City Infrastructure**<br>João Amaral, João Viegas, Bruno Lemos, Pedro Almeida, Rodrigo Rosmaninho, Gonçalo Perna, Pedro Rito, Susana Sargento<br>Instituto de Telecomunicações, Universidade de Aveiro<br><br>**Enhanced Multiple DBSCAN Algorithm for Traffic Detection Using mmWave Radar**<br>Bao Ming Ding, McMaster University<br>Yixin Huangfu, McMaster University<br>Howard Zhang, McMaster University<br>Ching-Hung Tan, McMaster University<br>Saeid Habibi, McMaster University<br><br>**Wind Sensitivity of Electric Vehicle Energy Consumption and Influence on Range Prediction and Optimal Vehicle Routes**<br>Trung Tran, University of Michigan<br>Ilya Kolmanovsky, University of Michigan<br>Erik Biberstein, Ford Motor Company<br>Omar Makke, Ford Motor Company<br>Marina Tharayil, Ford Motor Company<br>Oleg Gusikhin, Ford Motor Company |
| **11:30 – 13:30** | **Lunch and Break** |

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| **13:30 – 15:00** | **Conference Session** V **(90 minutes) – Planning and Control Technologies**<br>**Session Chair: Qing Yang**<br><br>**Effects of Neural Network Architecture on Topography Estimation from Satellite Imagery for Multi-Terrain Autonomous Vehicle Path Planning and Control**<br>Ryan Lynch, North Carolina State University<br>Sumedh Beknalkar, North Carolina State University<br>Jack Lynch, North Carolina State University<br>Andre Mazzoleni, North Carolina State University<br>Matthew Bryant, North Carolina State University<br><br>**Intervention Request Planning with Operator Capability Model for Human-Automation Cooperative Recognition**<br>Atsushi Kuribayashi, Nagoya University<br>Eijiro Takeuchi, TierIV Inc.<br>Alexander Carballo, Nagoya University<br>Yoshio Ishiguro, The University of Tokyo<br>Kazuya Takeda, Nagoya University<br><br>**Improving GPS-based Mode of Transport Detection in Multi-Modal Trips using Stop Analysis**<br>Jens Klinker, Technical University of Munich<br>Mariana Avezum-Mercer, Technical University of Munich<br>Stephan M. Jonas, University Hospital Bonn |
| **15:00 – 15:15** | **Coffee Break** |
| | **Conference Session** VI **(120 minutes) – Emerging Technologies in Mobility**<br>**Session Chair: Liangkai Liu**<br><br>**Predictive World Models from Real-World Partial Observations**<br>Robin Karlsson, Nagoya University<br>Alexander Carballo, Gifu University<br>Keisuke Fujii, Nagoya University<br>Kento Ohtani, Nagoya University<br>Kazuya Takeda, Nagoya University |

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| **15:15 – 17:15** | **SLAM Sharing Among Heterogeneous Sensors**<br>Ren Zhong, Wayne State University<br>Liangkai Liu, Wayne State University<br>Weisong Shi, University of Delaware<br><br>**Presenting a Statistical Approach for Transforming Standardized German Traffic Surveys into Origin-Destination Matrices**<br>Jens Klinker, Technical University of Munich<br>Joe Yu, Technical University of Munich<br>Mariana Avezum-Mercer, Vay Technology GmbH<br>Stephan M. Jonas, University Hospital Bonn<br><br>**Dual-Weight Particle Filter for Radar-Based Dynamic Bayesian Grid Maps**<br>Max Peter Ronecker, Technical University Graz<br>Michael Stolz, Technical University Graz<br>Daniel Watzenig, Technical University Graz |
| **17:15 – 19:00** | **Reception/Demos and Posters** |

| 8:00 – 9:00 | **Breakfast** |
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| 9:00 – 10:30 | **Conference Session VII (90 minutes) – Validation and Testing**<br>**Session Chair: Lanyu Xu**<br><br>**A Strategy for Boundary Adherence and Exploration in Black-Box Testing of Autonomous Vehicles**<br>John M. Thompson, Embry-Riddle Aeronautical University<br>Quentin Goss, Embry-Riddle Aeronautical University<br>Mustafa Ilhan Akbas, Embry-Riddle Aeronautical University<br><br>**Sybil Detection in Connected Vehicle Systems via Angle-of-Arrival Estimation**<br>Tianye Ma, University of Delaware<br>Yidan Hu, Rochester Institute of Technology<br>Aishah Aseeri, King Abdulaziz University<br>Mark Nejad, University of Delaware<br>Rui Zhang, University of Delaware<br><br>**Integration of Formal Specification and Traffic Simulation for Scenario-Based Validation**<br>Quentin Goss, Embry-Riddle Aeronautical University<br>Mustafa Ilhan Akbas, Embry-Riddle Aeronautical University |
| 11:30 – 13:30 | **Lunch and Break** |
| 13:30 – 14:00 | **AWS SOAFEE + Fleet-wise demo**<br>**Speaker:** Srini Raghavan, Amazon |
| 14:00 – 16:00 | **Tutorial: Autoware – ROS-based OSS for Autonomous Driving**<br>**Speaker:** Alexander Carballo, PIX Moving<br><br>**Autonomous vehicles exhibition** |
| 16:00 – 16: 15 | Conference Closing: Farewell from the General Chair |

| 8:00 – 9:00 | **Breakfast** |
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| 9:00 – 10:00 | **Technical Session (60 minutes)**<br>**Session Chair: Wenjia Li**<br><br>**Game Theory of Cheating Autonomous Vehicles**<br>Zhen Li and Qi Liao<br>Central Michigan University, USA<br><br><br>**USDOT Tier-1 University Transportation Center for Advancing Cybersecurity Research and Education**<br>Yunpeng Jack Zhang, Kailai Wang, Lingguang Song, Amaury Lendasse, Houbing Herbert Song, Zhu Han, Rakesh Verma, Arlei Silva, Carlos Rubio-Medrano, Zhixia Richard Li and Guohui Zhang |