🕐 **June 21, Monday**

Time	M-1: Regular Session	M-2: Regular Session	M-3: Regular Session	M-4: Regular Session	M-5: Lightning Session	M-6: Lightning Session
8:45 -9:00	**OPENING CEREMONY**					
9:00 -9:50	**KEYNOTE SESSION 1: Smart Mobility Management in the Era of Smart Transportation**					
	Host	Yafeng Yin, Neda Masoud				
	Speaker	Hai Yang				
9:50 -10:00	**BREAK**					
10:00 -11:20	**M-1: REGULAR SESSION** Behavior and demand	**M-2: REGULAR SESSION** Emerging Mobility	**M-3: REGULAR SESSION** Implication of Automated Vehicles	**M-4: REGULAR SESSION** Traffic Control and Management	**M-5: LIGHTNING SESSION** Data	**M-6: LIGHTNING SESSION** Modeling, Simulation, and Optimization
Chair / Host	Carolina Osorio carolina.osorio@hec.ca Sina Bahrami sinab@umich.edu	Zhengtian Xu zhengtian@email.gwu.edu Alex Sundt asundt@umich.edu	Gabor Orosz orosz@umich.edu Minghao Shen mhshen@umich.edu	Samitha Samaranayake samitha@cornell.edu Tara Radvand tararad@umich.edu	Qi Luo qiluo.email@gmail.com Yiyang Wang yiyangw@umich.edu	Ali Shirazi shirazi@maine.edu Amir Tafreshian atafresh@umich.edu
10:00 -10:20	28[Milos Balac](Dynamic Demand Estimation for Single-Ride AMoD and Fleet Size Optimization for Pooled AMoD across the Globe)	6[Francisco Calderon](On the Generality of Emerging Mobility Services' Operational Processes)	164[Qida Su](On the Build-Operate-Transfer Projects of Automated Roadways)	8[Michael Levin](Max-Pressure Signal Control with Cyclical Phase Structure)	30[Yohan Chang](SynTIS: Synthetic Traveler Information in Smart City)

10[Yosuke Kawasaki](Analysis of Features of the Routes Using Probe Trajectory Data) | 20[Marcel Kleiber](Simulating Traffic Dynamics Subject To Perceptional Errors)

39[Jie Yang](Mechanism Design for Stochastic Dynamic Parking Resource Allocation) |
| 10:20 -10:40 | 107[Eric Miller](A Tour-Based Transit Station Auto Access-Egress Model) | 94[Xiaohui Liu](A Data-Driven Approach to Manage the Curbside Ride-Hailing Pick-ups and Drop-offs) | 67[Fatemeh Fakhrmoosavi](Incorporating a Mixed Fleet of Autonomous, Connected, and Human-Driven Vehicles into a Mesoscopic Simulation Tool Considering Network Capacity Variations with Heterogeneous Drivers) | 19[Toru Seo](Evaluation of Large-Scale Complete Vehicle Trajectories Dataset on Two Kilometers Highway Segment for One Hour Duration: Zen Traffic Data) | 37[Jintao Ke](Origin-Destination Demand Prediction Via Spatial-Temporal Multi-Graph CNN) | 65[Yineng Wang](Online Operation Strategies for Automated Multistory Parking Facilities)

79[Chen Yang](Simulation-Based Comparisons of Signalized and Signal-free Intersection Controls under Connected and Automated Environments) |
10:40 -11:00	97[Abolfazl (Kouros) Mohammadian](Complexity of Travel-Based Multitasking and Its Association to Latent Lifestyles)	64[Bangyang Wei](Temporal Capacity Allocation and Tolling Schemes for Morning Commute with Carpooling)	122[Zhaocai Liu](Network User Equilibrium Problems with Infrastructure-Enabled Autonomy)	105[Qiong Tian](Traffic Light Control Strategy Based on Macroscopic Fundamental Diagram)	80[Xavier Ros-Roca](A Data Driven Approach to Dynamic Origin-Destination Matrix Estimation)	
11:00 -11:20	15[Wataru Nakanishi](Application of Eigenvector Spatial Filtering to Travel Destination Choice Model: A Case Study of Municipality-Size Choice in Hokkaido Island, Japan)	47[Zhengfei Zheng](The Critical Passenger Mass for Achieving a Societally Beneficial Ride-Splitting Program)	113[Carol Flannagan](Urban Taxi vs Non-taxi Crashes: Implications for Automated Vehicles in the Rideshare Environment)	127[Monika Filipovska](A Priori and Adaptive Reliable Routing in Stochastic Dynamic Networks with Correlations)	116[Celso Fernando](A Factor Extraction Method using Deep Learning Technique on Traffic Accident Risk)	
11:20 -11:30	**BREAK**					
11:30 -12:20	**KEYNOTE SESSION 2: Operational Strategies for Urban Air Mobility and 4D System Fundamental Diagrams**					
	Host	Ali Zockaie				
	Speaker	Hani Mahmassani				

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- Last updated: June 15, 2021.

🕐 **June 22, Tuesday**

ISTDM 2021

9:00 -9:50	KEYNOTE SESSION 3: On the Inefficiency and Management of Ride-Sourcing Services towards Urban Congestion					
	Host	Sean Qian				
	Speaker	Nikolas Geroliminis				

9:50 -10:00	BREAK					

10:00 -11:20	T-1: REGULAR SESSION Emerging Mobility	T-2: REGULAR SESSION Freight	T-3: REGULAR SESSION Data	T-4: REGULAR SESSION Behavior	T-5: LIGHTNING SESSION Emerging mobility	T-6: LIGHTNING SESSION Traffic Operations
Chair	Neda Masoud nmasoud@umich.edu	Ali Zockaie zockaiea@egr.msu.edu	Ali Shirazi shirazi@maine.edu	Sina Bahrami sinab@umich.edu	Ziqi Song ziqi.song@usu.edu	Qi Luo qiluo.email@gmail.com
Host	Ethan Zhang shuruiz@umich.edu	Anil Alan anilalan@umich.edu	Yiyang Wang yiyangw@umich.edu	Tian Mi tianm@umich.edu	Xunbi Ji xunbij@umich.edu	Daniel Vignon dvignon@umich.edu
10:00 -10:20	18[Yingyan Lou](Congestion Mitigation for Planned Special Event: Smart Parking, Ride-Sharing Drop-off Locations and Network Configuration)	170[Tanvir Ahamed](Deep Reinforcement Learning for Crowdsourced Urban Delivery: System States Characterization, Heuristics-guided Action Choice, and Rule-Interposing Integration)	156[Zijian Hu](Self-Calibration of Traffic Surveillance Camera Systems for Traffic Density Estimation on Urban Roads)	46[Mingyou Ma](Quantifying Day-to-Day Evolution of Choice Patterns in Public Transit System with Smart Transit Card Data)	27[Aurore Sallard](Modeling Ride-Hailing Use in Megacities: Evidence from São Paulo) 178[Qianwen Li](Autonomous Vehicle Identification Based on Car-Following Data) 76[Huimin Yan](Coordinated Space-Time Trajectory Planning and Cyclic Control in Automated Vehicle Zones) 59[Rafaqat Ali](A Multimodal Traveling Itinerary Problem in a Time Dependent Multimodal Transportation Network for a Fixed Sequence of Nodes with Time Windows) 106[Evangelos Mintsis](Management of Connected and Automated Vehicle Disengagements in the proximity of Work Zones)	52[Zhanguo Song](Short-Term Traffic Flow Uncertainty Prediction Using an Improved Grey Prediction Model under Different Time Intervals) 109[Rongsheng Chen](Traffic Assignment Analysis of Traffic Networks with Max-Pressure Control) 90[Rui Okuhara](Effect of Traffic Accident on Arterial Road Network) 150[Lukáš Vacek](Discontinuous Galerkin Method for Macroscopic Traffic Flow Models on Networks using Numerical Fluxes at Junctions) 120[Md Abu Sayed](Predict Short-Term Traffic Flow with Prediction Error from Traffic Sensor Data Using Deep Learning) 166[Monika Filipovska](Computation and Estimation of Path Travel Time Variability with Sparse Vehicle Trajectory Data)
10:20 -10:40	32[Amirmahdi Tafreshian](Proactive Vehicle Dispatching in Large-Scale Ride-Sourcing Systems)	51[Sudheer Ballare](A Many-to-Many Vehicle Routing Problem with Split Loads)	81[Ang Li](Within-Day Prediction of Path Travel Times with Use of Multi-Source of Traffic Data)	118[Hebert Azevedo-Sa](Using Trust in Automation to Enhance Driver-(Semi)Autonomous Vehicle Interaction and Improve Team Performance)		
10:40 -11:00	141[Kenan Zhang](A General Spatiotemporal Equilibrium Model of Ride-Hail Market)	99[Mausam Duggal](Unknown to Known: Predicting Truck GPS Commodity Using Machine Learning)	85[Di Yang](Exploring the Possibility of Outlier Detection Using Functional Data Analysis for Proactive Safety Management)	86[Ragavendran Gopalakrishnan](Behavioral Models of Users in Ride-Sharing)		
11:00 -11:20	161[Min Xu](Addressing the Fleet Sizing Problem for Shared-and-Autonomous-Mobility Services)	89[Guoqing Zhang](An Integrated Location-Inventory Model for the Healthcare Supply Network under Stochastic Demands)	154[Xiangyang Guan](Correcting Biases in Using Emerging Big Data for Mobility Research: A Likelihood-Based Approach)	138[Zhengtian Xu](Understanding Ride-Sourcing Drivers' Customer-Search Behavior)		

11:20 -11:30	BREAK					

11:30- 12:20	KEYNOTE SESSION 4: Lagrangian Control at Large and Local Scales in Mixed Autonomy Traffic Flow					
	Host	Gabor Orosz				
	Speaker	Alexandre Bayen				

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🕐 **June 23, Wednesday**

9:00 -9:50	**KEYNOTE SESSION 5: Intelligent Driving Intelligence Test for Autonomous Vehicles with Naturalistic and Adversarial Driving Environment**					
	Host	Carolina Osorio				
	Speaker	Henry Liu				

9:50 -10:00	**BREAK**					

10:00 -11:20	**W-1: REGULAR SESSION** Connected and Automated Vehicles	**W-2: REGULAR SESSION** Traffic Operations	**W-3: REGULAR SESSION** Data-Informed Decision Making	**W-4: REGULAR SESSION** Shared Mobility	**W-5: LIGHTNING SESSION** Behavior	**W-6: LIGHTNING SESSION** Modeling, Simulation, and Optimization
Chair Host	Xiaopeng Li xiaopengli@usf.edu Hao Wang haowangm@umich.edu	Ali Zockaie zockaiea@egr.msu.edu Tara Radvand tararad@umich.edu	Xiaotong Sun xtsun@umich.edu Amir Tafreshian atafresh@umich.edu	Sean Qian seanqian@cmu.edu Zhichen Liu zhichliu@umich.edu	Ali Shirazi shirazi@maine.edu Mojtaba Abdolmaleki mojtabaa@umich.edu	Ziqi Song ziqi.song@usu.edu Tianming Liu tianmliu@umich.edu
10:00 -10:20	57[Yingyan Lou](How Small Can Headways Be in Platoons of Connected Autonomous Vehicles?)	43[David Hale](A Methodology for Trajectory-Based Calibration of Microsimulation Models)	11[Shogo Umeda](Risk Evaluation of Anomaly Event Occurrence Using Probe Vehicle Data)	48[Jintao Ke](Online Optimization and Offline Learning for On-Demand Matching in Ride-Sourcing Services)	50[Jingxing Wang](Neighborhood Level Impacts in Human Travel Patterns: Findings from the Closure of Alaskan Way Viaduct)	71[Zhixiong Luo](Joint Deployment of Low Emission Zones and Electric Vehicle Charging Stations)
10:20 -10:40	23[Tamas Molnar](On-Board Traffic Prediction Via V2X Connectivity)	69[Ali Zockaie](Investigating Weather Impacts on Network-Wide Traffic Flow Relationships)	82[Jiqian Dong](Lane-Change Decisions of Connected Autonomous Vehicles Using Spatially-Weighted Information and Deep Reinforcement Learning)	173[Ester Lorente](An Agent-based Simulation Model for Intermodal Assignment of Public Transport and Ride Pooling Services)	88[Hui Shen](Travel Mode Choice of Young People with Differentiated E-Hailing Ride Services: A Case Study in Nanjing China)	83[Ahmed Alshurafa](Exploring and Modeling Truck Tours and Their Associated Stop Locations: Towards a Micro-Simulation Approach)
10:40 -11:00	111[Xiaopeng Li](Vehicle Trajectory Optimization at a Signalized Intersection in Mixed Traffic: Model and Field Experiments)	153[Daniel Bramich](FitFun: Improved noise models for Fundamental Diagrams)	68[Matthew Daus](Big Data Transportation Data Access & Privacy in a Multi-Modal Autonomous & Connected World)	144[Xiaolin Cai](Modeling and Simulation of Potential Use-Cases for Shared Mobility Services in the City of Ann Arbor)	93[Ehsan Rahimi](Analyzing the Adoption and Usage Frequency of Shared E-Scooters: A Zero-Inflated Ordered Probit Modelling Approach)	168[Md Mintu Miah](Challenges and Opportunities of Emerging Data Sources to Estimate Network-Wide Bike Counts)
11:00 -11:20	75[Jiaqi Ma](DTEM: Dynamic Traffic Environment Mapping for Connected and Automated Traffic Control)		140[Yiyang Wang](Real-Time Sensor Anomaly Detection and Recovery in Connected Automated Vehicle Sensors)	155[Nicholas Caros](Leveraging Destination Flexibility to Increase Ridesharing Participation: An Integrated Model and Case Study)	95[Bartosz Bursa](Modelling Tourist On-Site Mode Choice Decisions during Vacation Stays) 169[Xiangyang Guan](A Novel State-Transition Model for Real-Time Forecasting of Evacuation Demand)	114[Mohammad Miralinaghi](On the Optimization of Electric Charging Infrastructure to Address Vehicular Emissions) 74[Yi Guo](Signalized Corridor Management with Trajectory Prediction and Optimization under Mixed-Autonomy Traffic Environment)

11:20 -11:30	**BREAK**					

11:30 -12:20	**KEYNOTE SESSION 6: Better Journeys for All Through Impact, Innovation & Responsibility**					
	Host	Xiaopeng Li				
	Speaker	Fengmin Gong				

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🕐 **June 24, Thursday**

ISTDM 2021

9:00 -9:50	**KEYNOTE SESSION 7: Thinking about the Long-Term Impacts of the Pandemic**					
	Host	Samitha Samaranayake				
	Speaker	Kay Axhausen				

9:50 -10:00	**BREAK**					

	TH-1: REGULAR SESSION	**TH-2: REGULAR SESSION**	**TH-3: REGULAR SESSION**	**TH-4: REGULAR SESSION**	**TH-5: LIGHTNING SESSION**	**TH-6: LIGHTNING SESSION**
10:00 -11:20	**Electrification**	**Implication of Automated Vehicles**	**Behavior and Demand**	**Transportation Network Modeling**	**Data**	**Shared Mobility**
Chair	Ziqi Song ziqi.song@usu.edu	Ali Zockaie zockaiea@egr.msu.edu	Zhengtian Xu zhengtian@email.gwu.edu	Sean Qian seanqian@cmu.edu	Ali Shirazi shirazi@maine.edu	Qi Luo qiluo.email@gmail.com
Host	Zhichen Liu zhichliu@umich.edu	Sanghoon Oh osh@umich.edu	Amir Tafreshian atafresh@umich.edu	Tianming Liu tianmliu@umich.edu	Daniel Vignon dvignon@umich.edu	Mojtaba Abdolmaleki mojtabaa@umich.edu
10:00 -10:20	180[Lili Du](A Commercial Charging-as-a-Service Platform for Emerging Mobile EV to EV Charging Service)	143[Tony (Yoon-Dong) Lee](Developing and Simulating Pedestrian-Related Corner Case Scenarios for Autonomous Vehicles Testing)	103[Wenwen Zhang](Machine Learning Based Microsimulation Approach for the Spatial Distributions of Automated Vehicle Preferences)	24[Noriko Kaneko](Optimal Congestion Tolling Problem under the Markovian Traffic Equilibrium)	60[Walid Fourati](Estimating Fundamental Diagrams of Signalized Links from Aggregated Trajectories) 158[Mengxin Wang](Urban Courier: Operational Innovation and Data-Driven Coverage-and-Pricing) 159[Zahra Eftekhar](Kernel-based Approach to Reconstruct Travel Diaries from GSM Records) 87[Hui Shen](Preliminary Investigation of Crowd-shipping with Real-world Data: A Case Study of Atlanta, GA) 45[Ke Zhang](A Multi-Agent Reinforcement Learning Framework for Multiple Vehicle Routing Problems with Soft Time Windows) 125[Takahiro Tsubota](Deep Learning Model for Predicting Traffic Accident Risk on an Expressway)	40[Yunhai Gong](Exploring the Impact of Urban Built Environment on Land Use Diversity under Shared Autonomous Vehicles and Road Pricing) 101[Irene Martinez](Trip Length Distribution of TNC Trips: Based on Empirical Data in Chicago) 165[Matthew Dean](Synergies between Repositioning and Charging Strategies for Shared Autonomous Electric Vehicle (SAEV) Fleets) 148[Xiaotong Guo](Robust Matching-Integrated Vehicle Rebalancing in Ride-hailing System with Uncertain Demand) 171[Hao Guo](Optimal Assignment and Relocation of Shared Autonomous Vehicles Considering Mode Choices)
10:20 -10:40	152[Eleftheria Kontou](Alternative Fuel Vehicles Evacuation Planning: Modeling and Numerical Experiments)	121[Suresh Kumaar Jayaraman](Automated Vehicle Behavior Design for Pedestrian Interactions at Unsignalized Crosswalks)	147[Shenhao Wang](Theory-Based Residual Neural Networks: A Synergy of Discrete Choice Models and Deep Neural Networks)	55[Timothy Tay](A Gaussian Process Approach for High-Dimensional Simulation-Based Transportation Optimization)		
10:40 -11:00	66[Mohammadreza Kavianipour](Charging Infrastructure Planning in Urban Networks Considering Detour and Queuing Delay)	29[Xiangdong Chen](Rhythmic Control at Intersection: Concept and Properties)	174[Reza Ansari](Propagation Prediction in Urban Road Network During Accident)	123[Daisik Nam](A Model for System Optimum Dynamic Traffic Assignment with Minimum-Envy Allocations)		
11:00 -11:20	49[Xindi Tang](Online Operations of Automated Electric Taxi Fleets: An Advisor-student Reinforcement Learning Framework)	98[Andres Ladino](System Level Impacts of V2I-Based Speed Control Strategies: The SCOOP@F Project Deployment Scenarios)	7[Can Li](Probabilistic Public Transport Demand Estimation with Graph Convolution Neural Network)	163[Tingting Xie](Heterogeneous Information Provision on Traffic Networks with Competitive or Cooperative Information Providers)		

11:20 -11:30	**BREAK**					

11:30 -12:20	**KEYNOTE SESSION 8: What Can We Learn about Travel and Safety Implications from Partially Automated Vehicle Use?**					
	Host	Yafeng Yin, Neda Masoud				
	Speaker	Chandra Bhat				