

| Time   | MT-ITS2021 Day 2 - June 17 www.mt-its2021.org                  |  |   |  |
|--|--|--|---|--|
| <b>Session 1a - Pricing and control II</b>   |  |  |   |  |
|  | <u>Authors</u>   | <u>Title</u>   | <u>Authors</u>  | <u>Title</u>   |
| 09:00 - 09:06  | Bari C, Kumawat A, Dhamaniya A                                 | Effectiveness of FASTag System for Toll Payment in India   | Bracci A, Colombaroni C, Fusco G, Isaenko N   | Investigation and Modeling on Drivers' Route and Departure Time Choices from a Big Data Set of Floating Car Data             |
| 09:06 - 09:12  | Zhang Y, Fricker J   | Investigating Smart Traffic Signal Controllers at Signalized Crosswalks: A Reinforcement Learning Approach                               | Nguyen J, Stern R   | Modeling oscillatory car following using deep reinforcement learning based car following models                              |
| 09:12 - 09:18  | Gong X, Ma T, Antoniou C                                       | Network Traffic Dynamics Prediction with a Hybrid Approach: Autoencoder-VAR  | Gemma A, Mannini L, Carrese S, Cipriani E, Crisalli U   | A Gaussian Mixture Model Data Fusion Approach for Urban Travel Time Forecast   |
| 09:18 - 09:24  | Korentzelou A, Petraki V, Papantoniou P, Yannis G              | Investigating the acceptance of an environmental transport charging policy. The case of Athens.  | Dyrmishi S, Hadachi A   | Mobile Positioning and Trajectory Reconstruction Based on Mobile Phone Network data: A Tentative Using Particle Filter       |
| 09:24 - 09:30  | Lentzakis A, Seshadri R, Ben-Akiva M                           | Affinity Matrix Learning through Subspace Clustering for Tolling Zone Definition   | Seipel K, Zhao C, Seipel K, Hoyer R   | Optimization of the traffic flow in public transport through C-ITS   |
| 09:30 - 10:15  | <i>Panel discussion</i>  |  | <i>Panel discussion</i>   |  |
| 10:15 - 10:30  | <b>coffee break</b>  |  |   |  |
| <b>Session 2a - Mobility as a Service</b>  |  |  |   |  |
|  | <u>Authors</u>   | <u>Title</u>   | <u>Authors</u>  | <u>Title</u>   |
| 10:30 - 10:36  | Engelhardt R, Bogenberger K                                    | Benefits of Flexible Boarding Locations in On-Demand Ride-Pooling Systems  | Kaparias I, Miah S, Clegg S, Gao Y, Waterson B, Milonidis E   | Measuring the effect of highway design features on cyclist behavior using an instrumented bicycle                            |
| 10:36 - 10:42  | Tang Q, Armellini M  | An ant colony algorithm with penalties for the dial-a-ride problem with time windows and capacity restriction                            | D'Andreagiovanni F, Carrese S, Nardin A, Giacchetti T, Zamberlan L  | Seek & Beautify: integrating UAVs in the optimal beautification of e-scooter sharing fleets                                  |
| 10:42 - 10:48  | Kucharski R, Cats O  | MaaSIm - agent-based two-sided mobility platform simulator   | Nigro M, Carrese S, Giacchetti T, Algeri G, Ceccarelli G  | Analysis and Management of E-scooter sharing service in Italy  |
| 10:48 - 10:54  | Al-salih W, Esztergár-Kiss D                                   | Effects of Individual Characteristics on Travel Behavior: An Application of the Multinomial Logit Model                                  | Hamad S, Ma T, Antoniou C   | Analysis and Prediction of Bikesharing Traffic Flow - Citi Bike, New York  |
| 10:54 - 11:00  | Esztergár-Kiss D, Mátrai T, Aba A                              | MaaS framework realization as a pilot demonstration in Budapest  | Ceccarelli G, Cantelmo G, Nigro M, Antoniou C   | Machine Learning from imbalanced data-sets: an application to the bike-sharing inventory problem                             |
| 11:00 - 11:45  | <i>Panel discussion</i>  |  | <i>Panel discussion</i>   |  |
| 11:45 - 12:00  | <b>coffee break</b>  |  |   |  |
| <b>Session 3a -Connected Autonomous Vehicles II</b>  |  |  |   |  |
|  | <u>Authors</u>   | <u>Title</u>   | <u>Authors</u>  | <u>Title</u>   |
| 12:00 - 12:06  | Iacobucci R, Donhauser J, Schmöcker J, Pruckner M              | Frequency Control Reserve Provision from a Fleet of Shared Autonomous Electric Vehicles  | Papathanasopoulou V, Spyropoulou I, Perakis H, Gikas V, Andrikopoulou E   | Classification of pedestrian behavior using real trajectory data   |
| 12:06 - 12:12  | Coelho M, Coelho M, Bandeira J                                 | Emission and safety impacts of automated vehicle penetration in a university campus  | Malik F, Dala L, Busawon K  | Intelligent nanoscopic road safety model for cycling infrastructure  |
| 12:12 - 12:18  | Shang M, Stern R   | A hybrid fundamental diagram for modeling mixed human and automated traffic flow   | Huber S   | Synthetization of bicycle route data from aggregate GPS-based cycling data and its utility for bicycle route choice analysis |
| 12:18 - 12:24  | Mattas K, Albano G, Ciuffo B                                   | Traffic impacts of commercial Adaptive Cruise Control time-gap policy  | Huber S, Lißner S, Lindemann P, Muthmann K, Schnabel A, Friedl J  | Modelling bicycle route choice in German cities using open data, MNL and the bikeSim web-app                                 |
| 12:24 - 12:30  | Negro P, Ridderskamp D, Paul M, Fehn F, Bogenberger K          | Cost Structures for On-Demand Mobility Providers in the Context of Vehicle Electrification and Automation                                | Johnson D, Chaniotakis E  | Innovative last mile delivery concepts: Evaluating last mile delivery using a traffic simulator                              |
| 12:30 - 13:15  | <i>Panel discussion</i>  |  | <i>Panel discussion</i>   |  |
| 13:15 - 14:00  | <b>Lunch break</b>   |  |   |  |
| <b>Session 4a -Transport modeling in European research projects: implications, ideas and synergies</b> |  |  |   |  |
|  | <u>Authors</u>   | <u>Title</u>   | <b>Sessin 4b - AUTOTRAC project</b>   |  |
| 14:00 - 14:06  | Josep Maria Salanova Grau                                      | Intro: The Levitate, Momentum, and Harmony projects  | <u>AUTOTRAC2020 Final Event.</u>  |  |
| 14:06 - 14:12  | Josep Maria Salanova Grau                                      | Planning the supply side of sharing and on-demand mobility systems   | The session will host the final event of the AUTOTRAC 2020 robotic competition organised by the European Commission Joint Research Centre, where the three teams still in the running will compete against each others to identify the winning team. More information on the competition can be found at the following link:<br><br><a href="https://ec.europa.eu/jrc/en/event/other-event/jrc-autotrac-2020-how-future-road-transport-will-look">https://ec.europa.eu/jrc/en/event/other-event/jrc-autotrac-2020-how-future-road-transport-will-look</a><br><br>Autotrac: <a href="https://ec.europa.eu/jrc/en/event/other-event/autotrac-2020-final-event">https://ec.europa.eu/jrc/en/event/other-event/autotrac-2020-final-event</a><br><br>Link to the final event:<br><a href="https://ecconf.webex.com/ecconf/j.php?MTID=m2b83212a342fb104b7a619e774f63a27">https://ecconf.webex.com/ecconf/j.php?MTID=m2b83212a342fb104b7a619e774f63a27</a> |  |
| 14:12 - 14:18  | Mark Brackstone  | Multi-resolution assessment framework of connected and autonomous mobility services for strategic planning                               |   |  |
| 14:18 - 14:24  | Santhanakrishnan Narayanan                                     | Aggregate four-step models and disaggregate agent-based models, but what is in between?  |   |  |
| 14:24 - 14:30  | Manos Chaniotakis  | A Software-Agnostic Agent-based Platform for Modelling Emerging Mobility Systems   |   |  |
| 14:30 - 15:15  | <i>Panel discussion</i>  |  |   |  |
| 15:15 - 15:30  | <b>coffee break</b>  |  |   |  |
| <b>Session 5a -Public transport II</b>   |  |  |   |  |
|  | <u>Authors</u>   | <u>Title</u>   | <u>Authors</u>  | <u>Title</u>   |
| 15:30 - 15:36  | Buijtenweg A, Verma T, Cats O, Donners B, Wang H               | Quantifying the hierarchy of public transport networks   | Musulino G, Rindone C, Vitetta A  | A modelling framework to simulate paths and routes choices of freight vehicles in sub-urban areas                            |
| 15:36 - 15:42  | Ballis H, Alogdianakis F, Nikolaou P, Stylianou K, Dimitriou L | Fusion of General Transit Feed Specification (GTFS) and passenger count data: A case study on Cyprus Transit System                      | Amin S, Ali L, Wehbi M  | Backpropagation Algorithms of Neural Networks to construct the Railway Track Deterioration Model                             |
| 15:42 - 15:48  | Gentile G, Bresciani Miristice L, Tiddi D, Meschini L          | The Hyper Run Assignment Model: simulation on a diachronic graph of congested transit networks with fail-to-board probabilities at stops | Büchel B, Spanniger T, Corman F   | Modeling Evolutionary Dynamics of Railway Delays with Markov Chains  |
| 15:48 - 15:54  | Bosi T, D'Ariano A., Amorosi L, Luca Giacco G.                 | A Fast and Effective Greedy Heuristic for On-line Train Calendars Generation   | Gallo F, Di Febbraro A, Giglio D, Sacco N   | Planning and optimization of passenger railway services with virtually coupled trains  |
| 15:54 - 16:00  | Drabicki A., Cats O, Kucharski R                               | Can real-time crowding information help mitigate bus bunching?   | Spanniger T, Büchel B, Corman F   | Probabilistic Predictions of Train Delay Evolution   |
| 16:00 - 16:45  | <i>Panel discussion</i>  |  | <i>Panel discussion</i>   |  |
| 16:45 - 17:00  | <b>coffee break</b>  |  |   |  |
| 17:00 - 18:00  | <b>Keynote - Prof. Kara Kockelman</b>                          |  |   |  |
| 18:00 - 18:15  | <b>Closing remarks (Prof. Antoniou)</b>                        |  |   |  |