

May 28th, Wednesday

OS01 Big Data Collection and Analysis I 14:00-15:30, May 28th | Room 206

- OS01-01 How Can LTE/5G Cellular Data Address Geographic and Sociodemographic Bias in Household Travel Surveys?
Jisu Kim, Ajou University, Republic of Korea
- OS01-02 Trip Generation in the Philippines: Analysis of Traditional, Geospatial, and AI-based Models
Kervin Joshua Lucas, Korea Advanced Institute of Science and Technology (KAIST), Republic of Korea
- OS01-03 Selection and Analysis of a Route Choice Model for Metro Systems: Investigating Time-Dependent Variations in Factor Influence
Junhee Lee, Korea University, Republic of Korea
- OS01-04 Analysis of Public Transportation Trips in Seoul Based on Trip Purpose Inference
Jeric Taehyung Kim, Seoul National University, Republic of Korea
- OS01-05 Two-Level Traffic Condition And Pattern Recognition Using K-Means Clustering
Leen Amireh, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea

OS02 Automated Driving System I 14:00-15:30, May 28th | Room 103

- OS02-01 The Value of Scenario Databases for the Development And Validation of Automated Driving Systems
Olaf Op den Camp, TNO, Netherlands
- OS02-02 Imitation Learning-Based Traffic Signal Optimization Using Expert Control Data
Joonho Park, Ajou University, Republic of Korea
- OS02-03 Developing a Risk Recognition System Based on a Large Language Model for Autonomous Driving
Donggyu Min, Seoul National University, Republic of Korea
- OS02-04 Simulation of autonomous vehicle disruption in various road conditions and its impact on traffic efficiency
Boram Woo, korea transport institute, Republic of Korea

OS03 **Big Data Collection and Analysis II**
16:00-17:30, May 28th | Room 206

- OS03-01 Investigation of Lane-Change Maneuvers in Highway Merging Sections Using Wavelet Transform and Empirical Trajectory Data
Seungmin Oh, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS03-02 Prediction Models for Travel Mode and Trip Purpose Using Operator Networks
Kervin Joshua Lucas, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS03-03 Pedestrian Model Development and Optimization for Subway Station Users
Geon Hee Kim, Kyonggi University, Republic of Korea
- OS03-04 A Hybrid Calibration Framework for Microscopic Traffic Flow Models Using K-means Clustering and Quantum Optimization
Hyeokju Nam, University of Seoul, Republic of Korea

OS04 **Automated Driving System II**
14:00-15:30, May 28th | Room 104

- OS04-01 Comparing Dynamic Traffic Flow to Human-Driven Vehicles with Cautious and Aggressive Autonomous Vehicles Behaviour
Maftuh Ahnan, University of Science & Technology, KICT School, Indonesia
- OS04-02 Study on the Impact of Autonomous Driving Levels and Vehicle Penetration on Traffic Flow and Network Efficiency
Minji Cho, Kongju National University, Republic of Korea
- OS04-03 Development of Driving Safety Evaluation Framework for Automated Vehicles Based on Urban Roads
Youngtaek Lee, Ajou University, Republic of Korea
- OS04-04 LiDAR Vs. Stereo Camera in Autonomous Driving: Accuracy and Periodicity in Dynamic Scenarios
Junyoung Kim, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS04-05 Xai-Informed Comparative Safety Performance Assessment of Human Driver Crashes and Automated Vehicle Failures
Hyeonseo Kim, korea transport institute, Republic of Korea

May 29th, Thursday

OS05 Smart Transport Infrastructure I 11:00-12:30, May 29th | Room 206

- OS05-01 Evaluation of Pedestrian Future Conflict at Non-Signalized Intersections Based on Probabilistic Trajectory Prediction
Tengfeng LIN, Korea Advanced Institute Of Science And Technology (KAIST), Republic of Korea
- OS05-02 Predicting Downstream Vehicle Movement at Smart Intersections
Euijin Lee, Seoul National University, Republic of Korea
- OS05-03 Beyond the Red and Green: Exploring the Capabilities of Smart Traffic Lights in Malaysia.
Ir. Mohd Fairuz Muhamad Mamat, Government, Malaysia
- OS05-04 A Luminance-Based Lane Infrastructure Quality Assessment System for Smart Cities
Pathum Rathnayaka, U1 Geographic Information System, Republic of Korea
- OS05-05 Optimizing Dynamic Allocation of Dedicated Lanes for Crowd Movements in Urban Transportation Networks
Soyeon Lee, University of Seoul, Republic of Korea

OS06 Sustainable Urban Transport I 11:00-12:30, May 29th | Room 205

- OS06-01 Developing Machine Learning Models for Predicting Microscopic Emissions From On-Road Vehicles: A Preliminary Study
Sungmin Kim, Inha University, Republic of Korea
- OS06-02 Optimizing Highway EV Charging Stations: Hierarchical Approach for Locating and Allocating Fast Chargers
Gimin Roh, Hongik University, Republic of Korea
- OS06-03 Riding in the Dark: How Built Environment Features Shape Nighttime Cycling Routes in South Korea
Raihan Pasha Isheka, Korea Advanced Institute of Science & Technology (KAIST), Republic of Korea
- OS06-04 A Study on User Preference Analysis for Incentive Schemes Promoting Public Transport Mode Shift
Jiho Kim, University of Seoul, Republic of Korea
- OS06-05 Optimizing Drone-Truck Coordination: A Path Planning Model for Energy Efficiency, Cost Savings, and Sustainable Last-Mile Delivery

Wenxuan Ou, Korea Advanced Institute Of Science And Technology (KAIST),
Republic of Korea

OS07 Smart City Solution
11:00-12:30, May 29th | Room 104

- OS07-01 A Study on the Calculation and Operation of Signal Systems According to Traffic Congestion Situations Using Digital Twin
Jiyeong Seo, TOMMs (coporation company), Republic of Korea
- OS07-02 The Role of Lidar in the Vehicle-to-Everything (V2X)
Steven Sheffield, Seyond, United States of America
- OS07-03 Development of a Battery Simulator for Electric Vehicle Lifecycle Testing Considering Road and Traffic Conditions
Dongmin Kim, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS07-04 Green Mobility Mileage Tracking and Recording Platform in Taiwan
Ya-Wen CHEN, University of Taipei, Chinese Taipei

OS08 Automated Driving System III
11:00-12:30, May 29th | Room 103

- OS08-01 A Study on High-Precision Vehicle Navigation for Autonomous Driving in Ultra-Long Underground Expressway
Kyoungeo Choi, Korea Automotive Technology Institute, Republic of Korea
- OS08-02 Optimizing Highway Merging: A Comparative Study of Cooperative and Competitive Automated Vehicle Strategies
Joonho Park, Ajou University, Republic of Korea
- OS08-03 Operational Design Domain on Autonomous Vehicle Accident Analysis: Machine Learning Using Field Data
Boram Woo, korea transport institute, Republic of Korea
- OS08-04 Analyzing Crash Clusters in Vehicles Equipped with Advanced Driving Technologies
Mahdi Khorasani, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea

OS09 Smart Transport Infrastructure II
14:00-15:30, May 29th | Room 206

- OS09-01 Essential Role of RF Scanning and Tunnel Planning in GPS-Link Installation
Wonwoo Lee, Korea Express Way Research Institute, Republic of Korea
- OS09-02 Artificial Intelligence in Transport Systems(AITS): Architecture, Design, and Analysis
Jihong Bae, Straffic Co., Ltd., Republic of Korea
- OS09-03 Development of a Multi-Directional BLE Beacon-Based Radio-Positioning System for Vehicle Navigation in GNSS-Shadow Roads
Taekyung Sung, Chungnal National University, Republic of Korea
- OS09-04 Development of ADAS Support System Based on Microwave Signal Conversion for Improving Radar Recognition Errors
Hojae Kim, Hanyang University, Republic of Korea

OS10 Sustainable Urban Transport II
14:00-15:30, May 29th | Room 205

- OS10-01 Development of the Resilience Indicators of Metro Systems for Flood Disaster under Climate Change
Pei-Yu TSAI, National Cheng Kung University, Chinese Taipei
- OS10-02 Standardization Activities for Green ITS Responding to Climate Changes
Jeongeun Joo, ITS Korea, Republic of Korea
- OS10-03 Travel Characteristics of Public and Private Bicycle Using Big Data
Minsong Kim, Hanbat National University, Republic of Korea
- OS10-04 Mitigating Transport CO2 Emissions: The Role of Electric Vehicles and Policy Measures
Junwook Chi, University of Hawaii at Manoa, United States of America

OS11 New Mobility and Transit Accessibility

14:00-15:30, May 29th | Room 104

- OS11-01 Vulnerability Assessment of Origin-Destination Pairs for Elderly Subway Users Using Smartcard Data
Eunjung Kim, Seoul National University, Republic of Korea
- OS11-02 Behavioral Comparisons of Route Choice for Travel Time Attributes on the Metro Network
Shinhyung Cho, University of Seoul, Republic of Korea
- OS11-03 Understanding Dockless Shared E-Scooter Trip Behavior: A Data-Driven Approach to Trip Purpose Classification
Songmi Paek, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS11-04 Investigating the Urban Disparities of Air Pollution Exposure During Transit Access by Adopting Spatiotemporal Nonparametric Approaches
Youngwoong Kim, University of Seoul, Republic of Korea

OS12 Cooperative and Connected Vehicles

14:00-15:30, May 29th | Room 103

- OS12-01 Integrating V2X in the Automotive E/E Architecture – A Comparison Between Different Approaches
Jan-Karl Ries, Vector Informatik GmbH, Germany
- OS12-02 Testing An Autonomous Vehicle On Public Roads – The Turin Case In The Frame Of IN2CCAM European Project
Lorenzo Valletta, TTS Italia, Italy
- OS12-03 Speed Harmonization Based on Multi-agent Reinforcement Learning under Urban Mixed Traffic Environment
Seunghyeon Lee, Seoul National University, Republic of Korea
- OS12-04 Augmented Safety Margin: a Metric for Evaluating Perception and Safety in Cooperative Perception
Saeyan Eom, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS12-05 Integrating an Actuated Signal Control Policy with Queue-based Green Light Optimal Speed Advisory (Q-GLOSA) Systems
Dohyeon Kim, University of Seoul, Republic of Korea

OS13 Big Data Analytics and Platform
16:00-17:30, May 29th | Room 206

- OS13-01 A Study on Imputation Methods for Missing Segments in AADT Data
Sihyeon Moon, Ajou University, Republic of Korea
- OS13-02 Data Interconnection System for the Development of a Web-Based Standard Compliance Validation Platform
Haejong Lee, ITS Korea, Republic of Korea
- OS13-03 Application of AI Technology on Expressway Road Surface Monitoring for Automated HPMS Construction
Ki Hoon Moon, korea expressway corporation research division, Republic of Korea
- OS13-04 Transformer Based Anomaly Detection for Traffic Sensor Malfunctions
Sewon Choi, Seoul National University, Republic of Korea

OS14 Sustainable Urban Transport III
16:00-17:30, May 29th | Room 205

- OS14-01 Exploring Factors Affecting Intercity Travel Mode Choice: Focused on Bus Rapid Transit (BRT)
Yumi Jeong, Hanbat National University, Republic of Korea
- OS14-02 Modeling the Impact of Smart and Sustainable Transport Strategies in Jakarta, Indonesia: A Focus on Urban Heat Islands and Air Quality
Frida Caturima Darojati, Ministry of National Development Planning, Indonesia
- OS14-03 A Data-Driven and Simulation Approach for the Safe Integration of Active Mobility Modes Into Singapore's Transport Ecosystem
Guangqu Yu, Aimsun Pte Ltd, Singapore
- OS14-04 Comparative Analysis of Route Choice Behavior Between Electric and Conventional Vehicle Drivers for Long-distance Trips
Minji Kang, University of Seoul, Republic of Korea

OS15 CAV and Digital Infrastructure
16:00-17:30, May 29th | Room 103

- OS15-01 Evaluation of Parking Management Strategies at Expressway Rest Areas in Mixed Traffic Environments Using Multiple Criteria Decision-Making Process
Songha Lee, Hanyang University, Republic of Korea
- OS15-02 Assessing the Post-Event Congestion Mitigation in a 24-Hour Traffic Scenario Using Simulation of Urban Mobility (SUMO)
Junhee Choi, Seoul National University, Republic of Korea
- OS15-03 Study of Enhancing Safety Using Intelligent Driver Model with RSS under Incident Situation of Mixed Traffic Flow of AVs and HDVs
Sangmin Park, Korea Transport Institute, Republic of Korea
- OS15-04 A Comparative Analysis of Mapping-Based Traffic Signal Disambiguation for Autonomous Vehicles
Sari Kim, NZERO, Republic of Korea

OS16 Shared Mobility
16:00-17:30, May 29th | Room 101+102

- OS16-01 Analysis of the Relationship Between Slope and Shared PM Travel Distance
Youngkook Kim, Korea Transport Institute, Republic of Korea
- OS16-02 Empirical Analysis Of Temporary Taxi Business Zone Integration In The Seoul Metropolitan Area: Implications For Smart Mobility Policy
Kunwoo Kim, Kakao Mobility Corp., Republic of Korea
- OS16-03 Modelling Commuter Behaviours with Carpooling Facilities as a Solution for Public Transport Connectivity
Yijia Wen, University of Canterbury, New Zealand
- OS16-04 Designing Shared Service Attributes for Maas Monthly Subscription Package
Sandar Win, Chulalongkorn University, Thailand

May 30th, Friday

OS17 Future Transport Systems I 09:00-10:30, May 30th | Room 206

- OS17-01 Improving Emergency Medical Services in Medically Underserved Areas: RTC Location Selection and UAM-Based Service Area Analysis
Seyoung Noh, Hanbat National University, Republic of Korea
- OS17-02 A Study on the Solution of Traffic Problems through the Establishment of Innovative New Highway
Taejin Park, AICT, Republic of Korea
- OS17-03 Simulation Study on the Impact of the E-scooter Assisting Alarm Sensor
Hui Zhi Ng, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS17-04 Development Of Vertiport Location Selection Models For Highway Emergency Patient Transport
Changyeob Lee, Korea Aerospace University, Republic of Korea
- OS17-05 Development of a Generalized Cost-based Urban Air Mobility Demand Estimation Methodology: Focusing on the Daegu-Gyeongbuk Airport
Taewon Bang, Keimyung University, Republic of Korea

OS18 Standardization and Policy 09:00-10:30, May 30th | Room 205

- OS18-01 A Study on the Analysis of Standards for Supporting Overseas Its Projects And Export
Jieun Choi, ITS KOREA, Republic of Korea
- OS18-02 Analysis on ITS Standards in Korea
Jeongeun Joo, ITS Korea, Republic of Korea
- OS18-03 Designing Safer Roads for AVs: The Role of Flex Zones, Information Systems, and Dedicated Lanes
Chaione Kim, Kyonggi University, Republic of Korea
- OS18-04 Standardized Measurement Methods on Tire/Road Noise In South Korea
Yonghee Kim, Youngsan University, Republic of Korea
- OS18-05 Advancing Road Safety in Southeast Asia: A Review of Research Trends And the Role of Intelligent Transport Systems
Paolo Ian Lucero, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea

OS19 New Safety and Security I
09:00-10:30, May 30th | Room 104

- OS19-01 Identification of Hazardous Road Spots in Mixed Traffic Based on Integrated Analysis of Driving and Traffic Simulations
Hyeonseok JIN, Hanyang University, Republic of Korea
- OS19-02 Identification of Traffic Accident Hotspot Based on Raster Data
Yongjin Park, University of Seoul, Republic of Korea
- OS19-03 Network-Based DUI Risk Assessment: Integrating Route Analysis and Optimized Hotspot Detection
Jaeyeong Lee, Korean National Police Agency, Republic of Korea
- OS19-04 A Data-Driven Approach for Identifying Pedestrian Accident Hotspots
Jooyoung Lee, Hannam University, Republic of Korea

OS20 Emergency Response and Management
09:00-10:30, May 30th | Room 103

- OS20-01 Influence of Selective Security Check on Heterogeneous Passengers at Metro Stations
Lounell Gueta, Hitachi Asia Ltd., Singapore
- OS20-02 Development of Proactive Road Management Policy by Means of Advanced Sensing Technology
Kihoon Moon, korea expressway corporation research division, Republic of Korea
- OS20-03 Streamlining Public Transport Information Management During Service Disruptions Using Integrated Digital Solutions
Lauren Strpko, Somar Digital, New Zealand
- OS20-04 Group-based Hierarchical Adaptive Traffic Control Systems for an Emergency Vehicle Priority Signal
Seulbin Hong, University of seoul, Republic of Korea

OS21 Protection for Pedestrians and Vulnerable Road Users

09:00-10:30, May 30th | Room 101+102

- OS21-01 Enhancing Micromobility Safety: Investigating Drivers' Overtaking Behaviors of Bicycles and E-Scooters under Varying Road Conditions and Cross-Modal Experience
Hyunchul Park, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS21-02 Deciphering Fatal/Severe Pedestrian Injury Crash Frequency at School Zone Crash Hotspots by Integrating Street Perception with Interpretable Machine Learning
Kaihan Zhang, Korea Advanced Institute of Science & Technology(KAIST), Republic of Korea
- OS21-03 Change in Compliance Rate Before And After Speed Limit Reduction on Urban And Non-Urban Roads
Wonbang Song, Korea Expressway Corporation, Republic of Korea
- OS21-04 Bi-level Recursive Calibration Approach for Pedestrian Microscopic Behavioral Models with Crowd Density Dynamics
Soyeon Lee, University of Seoul, Republic of Korea
- OS21-05 Test Level 5 (TI5) Precast Greenguard New Jersey Barriers (Njb): A Sustainable Safety Enhancement for Plus Expressway
Ir. Ts. Izman Khairi Ismail, GLC - PLUS Berhad, Malaysia

OS22 Future Transport Systems II

11:00-12:30, May 30th | Room 206

- OS22-01 Sustainable Urban Mobility in Smart Cities: Key Factors for Adopting Fuel Cell Electric Buses in Taiwan
Yen-Ning Wang, National Cheng Kung University, Chinese Taipei
- OS22-02 Traffic Congestion Measurement And Management With Floating Car Data (FCD)
Ralf-Peter Schäfer, TomTom Germany GmbH, Germany
- OS22-03 Dynamic Route Optimization of Demand-Response Transit Using Real Data with Commit Horizons
Jeongsik Yun, Konkuk University, Republic of Korea
- OS22-04 Impacts of the Built Environment on Demand for Demand-Responsive Transit Using Optimal Spatial Analysis Units
Dain Oh, Ajou University, Republic of Korea
- OS22-05 Reinforcement Learning Based Rebalancing Strategy for Ride-Sharing System

Addressing Demand Imbalance
Hyun Su Park, University of Seoul, Republic of Korea

OS23 Policy and Governance
11:00-12:30, May 30th | Room 205

- OS23-01 Analyzing Regional Extinction Risk Factors and Build Dynamic Simulations
Jungyoun Kim, Hanbat National University, Republic of Korea
- OS23-02 Barriers And Opportunities for Ev Adoption In New Zealand: Infrastructure, Policy, And Public Perception
Narayan Nepal, Yoobee College of Creative Innovation, New Zealand
- OS23-03 Millennials and Gen Z's Preferences for Airport Characteristics in Transfer Hubs: A Pilot Study
Junyuk Lee, Korea Advanced Institute of Science and Technology(KAIST), Republic of Korea
- OS23-04 Identifying the Impacts of New Transit on Commercial Gentrification Using Survival Analysis
Geonmin Kim, University of Seoul, Republic of Korea
- OS23-05 Unveiling Commuter Satisfaction Patterns Using Clustering Algorithms
Eunmo Gu, University of Seoul, Republic of Korea

OS24 New Safety and Security II
11:00-12:30, May 30th | Room 104

- OS24-01 A Policy Framework for C-ITS: Managing Long-Term and Short-Term Certificates
Seung-hwan JU, Autocrypt, Republic of Korea
- OS24-02 A Study on Safety Path Search Method Considering Traffic Accident Impedance and ADAS Factors
JiHun Han, Kongju University, Republic of Korea
- OS24-03 Investigating the Influencing Factors for Accident Duration on Full-Lane-Closure in Freeway
Min-Ji Kang, University of Seoul, Republic of Korea
- OS24-04 Suicide Attempt Alert System PLUS Berhad Initiative To Save Lives
Noor Ezwani Binti Nor kamal Nor kamal, GLC - PLUS Berhad, Malaysia

OS25 AI in Mobility
11:00-12:30, May 30th | Room 103

- OS25-01 Imputing Missing Non-Transit Trips From Incomplete Trip-Chains in Smart Card Data
Huichang Lee, Seoul National University, Republic of Korea
- OS25-02 Revolutionizing Traffic Management with Ai Technology
Karen Cheung, Yunex Pte. Ltd., Singapore
- OS25-03 The Potential of Large-Language Models as Regularizers in Deep Generative Models for Population Synthesis
Hyunsoo Yun, Seoul National University, Republic of Korea
- OS25-04 Deep Kalman Filter-based Dynamic Calibration of Stochastic Multi-lane Cell Transmission Models for Predicting Non-recurrent Congestion Impacts
Seungha Lee, University of Seoul, Republic of Korea
- OS25-05 Applying Transformer-Based Dynamic-Sequence Techniques to Transit Data Analysis
Bumjun Choo, Seoul National University, Republic of Korea