

ISTS & IWTDCS 2018 of 4th Aug. (Sat)

4 th Aug., 2018		Room 1	Room 2	Room 3
9:00 - 9:10		Opening ceremony		
9:10 - 9:55	Keynote 1	Modeling and Analysis of Ride-Sourcing Markets / <i>Yafeng Yin, Michigan University</i>		
9:55 - 10:30		Coffee break		
10:30 - 12:10	Session I	Oral session 1: Incident and accident	Oral session 2: Traffic flow	Special session 1: Wide-area disaster management
		(4) Incident Alert by an Anomaly Indicator of Probe Trajectories <i>Masanori Yoshida, Shogo Umeda, Yosuke Kawasaki and Masao Kuwahara</i> (9) Tensor robust principal component analysis with continuum modeling of traffic flow: Application to abnormal traffic pattern extraction in large transportation networks <i>Stanislav Lykov and Yasuo Asakura</i> (22) Traffic signal optimisation in disrupted road networks, including drivers' routing <i>Dana Abudayyeh, Dong Ngoduy and Alan Nicholson</i> (33) An analysis of risk factors for rear-ender accident on urban expressway considering accident severity <i>Satoshi Hyodo and Tomoyuki Todoroki</i> (67) Effect of Road Pavement Ages on Traffic Accident Risks <i>Takahiro Tsubota, Celso Fernando, Toshio Yoshii and Hirotooshi Shirayanagi</i>	(3) Traffic state estimation using small imaging satellites and connected vehicles <i>Toru Seo and Takahiko Kusakabe</i> (27) Impact of VSL location on capacity drop: A case of sag and tunnel bottlenecks <i>Irene Martinez and Wen-Long Jin</i> (51) Analysis on sag bottleneck phenomena based on multiclass traffic state estimation <i>Moto Takashima and Yasuhiro Shiomi</i> (57) A New Cell Transmission Model with Priority Vehicles and Special Lanes <i>Wen-Long Jin and Kentaro Wada</i>	(34) Effect of delay in information propagation on traffic congestion <i>Masayuki Kuchii, Takamasa Iryo, Masaya Furuta and Masao Kuwahara</i> (52) On the implementation of high performance computing extension for day-to-day traffic assignment <i>Wasuwat Petprakob, Lalith Wijerathne, Takamasa Iryo, Junji Urata and Kazuki Fukuda</i> (54) Scalable HPC enhanced agent based system for simulating mixed mode evacuation of large urban areas <i>Lalith Maddegedara, Wasuwat Petprakob, Leonel Aguilar and Muneo Hori</i> (65) Fast calculation of dynamic traffic assignment by parallelised network loading algorithm <i>Takamasa Iryo, Junji Urata, Kazuki Fukuda, Genaro Jr Peque, Wijerathne Lalith and Wasuwat Petprakob</i> (68) Development of a Traffic Demand Simulator under a Disaster Restoration Period <i>Junji Urata, Takamasa Iryo and Riki Kawase</i>
12:10 - 13:30		Lunch and Coffee break		
13:30 - 14:50	Session II	Oral session 3: Pedestrian & mixed traffic	Oral session 4: Microscopic simulation	Oral session 5: Prediction 1
		(20) Dynamic data collection of following and merging behavior in mixed traffic <i>Anuj Budhkar, Akhilesh Kumar Maurya and Avijit Maji</i> (35) Design of Variable Guidance for Pedestrian Evacuation <i>Yi-Ying Lin</i> (58) Modified Generalized Definitions for the Traffic Flow Characteristics under Heterogeneous, No-Lane Disciplined Traffic Streams <i>Suvin P. Venthuruthiyil and Mallikarjuna Chunchu</i> (62) Simulating "strategic" decisions for pedestrians' evacuation <i>Milad Haghani and Majid Sarvi</i>	(14) Investigating the performance of SPSA in Simulation-Optimization approaches to transportation problems <i>Xavier Ros-Roca, Lidia Montero, Arne Schneck and Jaume Barceló</i> (45) A modified particle swarm optimization algorithm to distribute lane changes in a freeway weaving segment <i>David Sulejic, Nasser Sabar and Edward Chung</i> (46) Simulating Interactions between Pedestrians, Segway Riders and Cyclists in Shared Spaces using Social Force Model <i>Charitha Dias, Hiroaki Nishiuchi, Satoshi Hyoudou and Tomoyuki Todoroki</i> (85) Calibration of Gipps' Car-Following Model for Trucks and its Impacts on Fuel Consumption <i>Johana Cattin, Ludovic Leclercq, Florian Pereyron and Nour-Eddin El Faouzi</i>	(49) Recurrent Neural Network Based Driving Cycle Development for Light Duty Vehicles in Beijing <i>Duoguan Qiu, Yuan Li and Dapeng Qiao</i> (69) A Long Short-Term Memory Neural Network Approach for Traffic Density Estimation with Sensor-equipped Probe Vehicles <i>Daisik Nam, Riju Lavanya, Inchul Yang, Woo Hoon Jeon and R Jayakrishnan</i> (81) Assessing spatiotemporal correlations from data for short-term traffic prediction using multi-task learning <i>Rafael Mena-Yedra, Jordi Casas and Ricard Gavalda</i>
14:50 - 15:10		Coffee Break		
15:10 - 16:30	Session III	Oral session 6: Public transport and transport policy	Oral session 7: Driving behavior	Oral session 8: Prediction 2
		(23) Optimization of Transit Timetables Considering Transit Assignment <i>Hua-Yen Wu, Kanticha Korsesthakarn, Yun-Ju Chen, Chia-Yu Kang Yi-Ying Lin and James C. Chu</i> (32) Integrated Network Transport Simulator to Evaluate Transport Policy for Reduction of Carbon Dioxide Emission <i>Masashi Okushima</i> (37) Optimization of urban transit network design and timetabling for round-trip routes <i>Yun-Ju Chen, Chia-Yu Kang, Yi-Ying Lin Kanticha Korsesthakarn and James C. Chu</i> (41) Identifying passengers who are at risk of reducing public transport use: A survival time analysis using smart card data <i>Hiroaki Nishiuchi and Makoto Chikaraishi</i>	(29) A Hybrid Method for Predicting a Potential Next Rest Stop of Commercial Vehicles <i>Rathachai Chawuthai, Thanunchai Threepak, Agachai Sumalee and Nattaphon Chankaew</i> (53) An Analysis of Attentional Disengagement Effect on Driver's Cognition of Road Gradient at Sag Sections <i>Hirotooshi Shirayanagi, Toshio Yoshii and Satoshi Hyodo</i> (56) A Study on the Average Travel Speed on Interrupted Flow Multi-Lane Highways <i>Edwin Akandwanaho, Miho Iryo and Hideki Nakamura</i> (59) Impact of the Direction of the Horizontal Curves on the Operating Speed Performance of the Vehicles on Hilly Terrain <i>Regulus Shallam, Suvin P. Venthuruthiyil, Mallikarjuna Chunchu and Anjan Kumar Siddagangaiah</i>	(6) Predicting congestion maps using convolutional long short-term-memory <i>Yan Li, Majid Sarvi, Kouros Khoshelham and Milad Haghani</i> (39) Real-time lane-based queue length prediction: a deep learning approach <i>Seunghyeon Lee, Kun Xie, Dong Ngoduy, Mehdi Keyvan-Ekbatani and Hong Yang</i> (83) Short-term prediction for bike-sharing service using machine learning <i>Bo Wang and Inhi Kim</i>
17:30 -		Gala dinner at Dogo Yamatoya		

ISTS & IWTDCS 2018 of 5th Aug. (Sun)

5 th Aug., 2018		Room 1	Room 2	Room 3
9:00 - 9:45	Keynote 2	Let's talk about peds! / <i>Serge Hoogendoorn, Delft University of Technology</i>		
9:45 - 10:15		Coffee Break		
10:15 - 11:35	Session IV	<p>Oral session 9: CASE (Connected, autonomous, shared, and electric)</p> <p>(30) A Study on the impact of AV-HDV mixed traffic on flow dynamics of single-lane motorway <i>Yuji Kakimoto, Miho Iryo, Emre Orhan and Hideki Nakamura</i></p> <p>(31) Spatial distribution of Blablacar's intercity peer-to-peer ride-sharing trips: Case study of Spain <i>Azarel Chamorro-Obra and Daisuke Fukuda</i></p> <p>(70) Simulation-Based Forecasting the Impacts of Autonomous Driving <i>Peter Sukennik, Jochen Lohmiller and Johannes Schlaich</i></p> <p>(84) The uncapacitated battery swapping facility location problem with localized charging system serving electric buses fleet <i>Wentao Jing, Inhi Kim and Kun An</i></p>	<p>Oral session 10: Data collection and new data</p> <p>(1) Identification of road bottlenecks on urban road networks using crowdsourced traffic data <i>Sakitha Kumaraage, Dimantha De Silva and Saman Jayaweera Bandara</i></p> <p>(24) Feature Extraction of Inter-region Travel Pattern Using Random Matrix Theory and Mobile Phone Location Data <i>Wataru Nakanishi, Hiromichi Yamaguchi and Daisuke Fukuda</i></p> <p>(28) Freight Traffic Analytics from National Truck GPS Data in Thailand <i>Agachai Sumalee, Treerapot Siriprote, Nattaphon Chankaew, Thanunchai Threepak, Hung Wai Ho and William H.K. Lam</i></p> <p>(48) Traffic Data Characterisation: Review and Challenges <i>Sara Respati, Ashish Bhaskar and Edward Chung</i></p>	<p>Oral session 11: Network & MFD</p> <p>(5) Relationship between the macroscopic fundamental diagram hysteresis and the spatial distribution of density for a multimodal network <i>Amr M. Wahaballa, Seham Hemdan and Fumitaka Kurauchi</i></p> <p>(38) Cross comparison of spatial partitioning methods for urban transportation network <i>Shin Hirabayashi, Takao Dantsuji, Qian Ge and Daisuke Fukuda</i></p> <p>(47) Using taxi GPS data for macroscopic traffic monitoring in large scale urban networks: calibration and MFD derivation <i>Shoufeng Lu, Victor L. Knoop and Mehdi Keyvan-Ekbatani</i></p> <p>(74) Local traffic pattern extraction with network-wide consistency in large urban networks <i>Yaroslav Hernández Potiomkin, Tamara Djukic and Jordi Casas</i></p>
11:35 - 12:10		Quick lunch		
12:10 -		Excursion		

ISTS & IWTDCS 2018 of 6th Aug. (Mon)

6 th Aug., 2018		Room 1	Room 2	
9:00 - 9:20		Shotgun poster presentation		
9:20 - 9:40		Coffee Break		
9:40 - 11:00	Session V	<p>Poster session</p> <p>(2) A Study on Road Network Perimeter Control Policy for Reducing Air Pollution in Urban Area / <i>Sunghoon Kim, Sehyun Tak, Yeeun Kim and Hwasoo Yeo</i></p> <p>(7) How desired speed level affects collective behavior of merging pedestrian crowds: insights from laboratory and simulated experiments / <i>Zahra Shahhoseini and Majid Sarvi</i></p> <p>(8) Design of Robust Signal Timings for arterial traffic variations using macroscopic simulation / <i>Chaitrali Shirke, Nasser Sabar, Edward Chung and Ashish Bhaskar</i></p> <p>(12) Travel-Demand Forecasting to Predict Demand for New Mobility Services Employing Autonomous Vehicles / <i>Ken Hidaka and Takahiro Shiga</i></p> <p>(13) Application of amp collectors in nairobi cbd for transport planning / <i>Yoshiya Nakagawa, Junji Nishida, Hiroaki Asao, Babu Mukoko and Koichiro Tamura</i></p> <p>(15) Modelling Cycling Flow for the estimation of cycling risk at a meso urban spatial level / <i>Suzanne Meade and Dr. Kathryn Stewart</i></p> <p>(17) The Effectiveness of Historical Travel-time Information of Road Network in Shared Autonomous Taxi System / <i>Zhiguang Liu, Tomio Miwa, Weiliang Zeng and Takayuki Morikawa</i></p> <p>(18) Quantitative Analysis Method of Traffic Service by Traffic Congestion under Developing Country / <i>Tsutomu Tsuboi</i></p> <p>(19) Proposal of vehicle control algorithm to achieve optimum traffic flow in a weaving section under fully-controlled condition in urban expressway / <i>Shinji Tanaka and Tomoyoshi Shirashi</i></p> <p>(21) Integration of Bus Network Design and Dial-a-ride Scheduling / <i>Hsin-Hui Shih, Chia-Yu Kang, Yi-Ying Lin, Kanticha Korsesthakarn, Yun-Ju Chen and James C. Chu</i></p>	<p>(36) Cleaning Wi-Fi Probe Request Data to Estimate Travel Time Reliability in Mixed Traffic / <i>Md. Shahin, Takahiko Kusakabe and Takashi Oguchi</i></p> <p>(40) Estimating Missing Path on Trajectories Trip by using Bluetooth Data: Case study of downtown area in Bangkok, Thailand / <i>Rattaporn Kaewkluengklom, Pattamaporn Wongwiriya, Tetsuhiro Ishizaka, Atsushi Fukuda and Sorawit Narupiti</i></p> <p>(42) Applicability of Virtual Reality Systems for Evaluating Pedestrians' Perception and Behavior / <i>Miho Iryo-Asano, Yu Hasegawa and Charitha Dias</i></p> <p>(50) Study on traffic condition after operating Bus Rapid Transit system in Hanoi / <i>Dung Nguyen and Yoshitaka Kajita</i></p> <p>(64) Representation of sag bottleneck phenomena by using commercial microscopic traffic simulators / <i>Mariko Nakai, Kenichiro Nakazawa and Yasuhiro Shiomi</i></p> <p>(77) Taxi passenger's getting on point prediction using deep learning / <i>Donggyun Ku, Jooyoung Kim and Seungjae Lee</i></p> <p>(78) A Study on the Effect of the Development of V2X-communication on the Improvement of Road Function / <i>Sungyong Na, Seungjae Lee and Jooyoung Kim</i></p> <p>(79) REAL-TIME TRAFFIC SIGNAL CONTROL UNDER V2X ENVIRONMENT USING DEEP Q NETWORK / <i>Sangchul Jung, Jooyoung Kim and Seungjae Lee</i></p> <p>(82) Urban growth, transport planning, air quality and health: A multi-objective spatial analysis framework for a linear monocentric city / <i>Judith Y. T. Wang and Richard D. Connors</i></p> <p>(87) High Collision Concentration Location Identification Method Based on Optimization Technique / <i>Jinwoo Lee, Iliia Papakonstantinou, Koohong Chung and Dong-Kyu Kim</i></p> <p>(88) An Empirical Study of Pedestrian Perceptions on Climate Change / <i>Jodie Y. S. Lee</i></p>	<p>Special session 2: ETC 2.0</p> <p>(44) Characteristics of ETC2.0 probe data compared to road traffic census data <i>Shohei Yasuda, Takamasa Iryo, Yuta Koyama and Katsuya Sakai</i></p> <p>(55) Feature Route Choice Analysis in the Tokyo Metropolitan Area Using a Link-Based Recursive Logit Model with Link Awareness <i>Noriko Kaneko, Hideki Oka, Makoto Chikaraishi, Henrik Becker and Daisuke Fukuda</i></p> <p>(66) Investigations of Electronic Toll Collection (ETC) 2.0 system for validation of map matching algorithm and analysis of spatial deviation in observed data <i>Katsuya Sakai, Yuta Koyama, Shohei Yasuda and Takamasa Iryo</i></p> <p>(73) Anomaly detection for instantaneous driving speed obtained from ETC 2.0 data in Japan <i>Wataru Yamamoto, Yuki Yamamoto, Rina Takayama and Makoto Tsukai</i></p>
11:00 - 11:20		Coffee break		
11:20 - 12:05	Keynote 3	Freeway Traffic Control via Variable Speed Limits / <i>Markos Papageorgiou, Technical University of Crete</i>		
12:05 - 12:20		Closing ceremony		