# Table of Contents

## MoPL1
### Plenary Keynote Talk (Plenary Session)
- **09:00-10:00 MoPL1.1**
  - Smart Grid and Electric Transportation (*I*).
  - Venayagamoorthy, Ganesh Kumar
  - Missouri Univ. of Science and Tech.

## MoBT1
### Advanced Safety Systems 1 (Regular Session)
- **10:30-10:52 MoBT1.1**
  - Time to Contact Estimation Using Interest Points, pp. 1-6.
  - Mueller, Dennis
  - Delphi Electronics & Safety
  - Nunn, Christian
  - Univ. of Wuppertal
  - Müller-Schneiders, Stefan
  - Delphi Corp.
  - Goermer, Steffen M.
  - Univ. of Wuppertal
  - Pauli, Josef
  - Univ. Duisburg-Essen
- **10:52-11:14 MoBT1.2**
  - Hyun, Eugin
  - Daegu Gyeongbuk Inst. of Science & Tech.
  - Lee, Jong-Hun
  - Daegu Gyeongbuk Inst. of Science & Tech.
- **11:14-11:36 MoBT1.3**
  - Yawning Detection for Monitoring Driver Fatigue Based on Two Cameras, pp. 12-17.
  - Li, Lingling
  - Beijing Univ. of Tech.
  - Chen, Yangzhou
  - Beijing Univ. of Tech.
  - Li, Zhentong
  - Beijing Univ. of Tech.
- **11:36-11:58 MoBT1.4**
  - Exploiting LiDAR-Based Features on Pedestrian Detection in Urban Scenarios, pp. 18-23.
  - Premebida, Cristiano
  - Inst. of Systems and Robotics, Univ. of Coimbra
  - Ludwig, Oswald
  - Inst. of Systems and Robotics, Univ. of Coimbra
  - Nunes, Urbano
  - Inst. of Systems and Robotics, Univ. of Coimbra

## MoBT2
### Imaging and Image Analysis 1 (Regular Session)
- **10:30-10:52 MoBT2.1**
  - Chen, Chia-Tseng
  - Automotive Res. & Testing Center
  - Chen, Yu-Song
  - Automotive Res. & Testing Center
- **10:52-11:14 MoBT2.2**
  - Fog Detection System Based on Computer Vision Techniques, pp. 30-35.
  - Bronte, Sebastian
  - Univ. de Alcalá
  - Bergasa, Luis M.
  - Univ. de Alcalá
  - Fernández Alcantarilla, Pablo
  - Univ. de Alcalá
- **11:14-11:36 MoBT2.3**
  - Vision System for Identifying Road Signs Using Triangulation and Bundle Adjustment, pp. 36-41.
  - Krishnan, Anupama
  - Kansas State Univ.
  - Lewis, Chris
  - Kansas State Univ.
  - Dwight, Day
  - Kansas State Univ.
- **11:36-11:58 MoBT2.4**
  - Kalezli, Fatih
  - Bahcesehir Univ.
  - Akbal, Yusuf Sinan
  - Gebze Inst. of Tech.

## MoBT3
### Geographic Information Systems in ITS (Regular Session)
- **10:30-10:52 MoBT3.1**
  - Shi, Wenhuan
  - Shanghai Jiao Tong Univ.
  - Shen, Shuhua
  - Shanghai Jiao Tong Univ.
  - Liu, Yuncai
  - Shanghai Jiao Tong Univ.
- **10:52-11:14 MoBT3.2**
  - Identification of Added Value ITS Services Using Concept Mapping Techniques, pp. 54-59.
  - Martinez-Torres, M. Rocío
  - Univ. of Seville
  - Díaz-Fernández, M. Carmen
  - Univ. of Seville
  - Toral-Martín, Sergio
  - Univ. of Seville
  - Berrero, Federico
  - Univ. of Seville
  - Cortès, Francisco J.
  - Univ. of Seville
  - Madrid’s
  - Univ. of Seville
- **11:14-11:36 MoBT3.3**
  - Methods on Dynamic Delineation of Intersections Based on Floating Car Data, pp. 60-65.
  - Xiong, Yingge
  - Tongji Univ.
  - Xu, Zhuoli
  - Tongji Univ.
A Service Choice Model for Optimizing Taxi Service Delivery, pp. 66-71.
Cheng, Shih-Fen
Qu, Xin
Singapore Management Univ.

Traffic Theory for ITS (Regular Session)

10:30-10:52
Stabilization of Traffic Flow Based on Multi-Anticipative Intelligent Driver Model, pp. 72-77.
Chen, Xiqun
Li, Ruimin
Xie, Weijun
Shi, Qixin
Tsinghua Univ.

Prediction of Traffic Density for Congestion Analysis under Indian Traffic Conditions, pp. 78-83.
Padiaith, Ameena
Vanajakshi, Lelitha
Subramanian, Shankar
Manda, Harishreey
Indian Inst. of Tech. Madras

Detection of Urban Traffic Flow's Synchronized Oscillations Using Spectral Envelope, pp. 84-89.
Zhao, Tingting
Hu, Jianming
Zhang, Yi
Li, Li
Zhang, Zuo
Li, Zhiheng
Tsinghua Univ.

Advanced Safety Systems 2 (Regular Session)

13:30-13:52
Miyaji, Masahiro
Oguri, Koji
Kawanaka, Haruki
Aichi Prefectural Univ.

Nagase, Atsushi
Kawanaka, Haruki
Bhuyan, Shoaib
Oguri, Koji
Aichi Prefectural Univ.

Vehicle Risks Assessment Using a Nokia N95, pp. 102-107.
Reveriego, Gerardo
Urdiales, Cristina
Sandoval, Francisco
Univ. de Málaga

SmartLDWS: A Robust and Scalable Lane Departure Warning System for the Smartphones, pp. 108-113.
Lan, Mars
Rofouei, Mahsan
Soatto, Stefano
Sarrafzadeh, Majid
UCLA

Imaging and Image Analysis 2 (Regular Session)

13:30-13:52
Video-Based Recognition of Unmarked Lanes Via Texture Interpretation and N-Level-Set-Fitting, pp. 114-119.
Schindler, Andreas
Lauren, Verena
Univ. of Passau

Cataiodptic Omnidirectional Vision Sensor Integration for Vehicle-Based Sensing, pp. 120-126.
Vu, Anh
Barth, Matthew
Univ. of California-Riverside

Loureiro, Pedro
Rossetti, Rosaldo
Braga, Rodrigo
Faculty of Engineering, Univ. of Porto
LIACC - Univ. of Porto
Artificial Intelligence and Computer Science Lab.

Robust Ground Plane Estimation Based on Particle Filters, pp. 134-140.
Linath, Andre Guilherme
Elektrobit Automotive GmbH
MoCT3
Energy/Environmental ITS (Special Session)
Organizer: Barth, Matthew
Univ. of California-Riverside

13:30-13:52 MoCT3.1
One Million Plug-In Electric Vehicles on the Road by 2015, pp. 141-147.
Saber, Ahmed
Missouri Univ. of Science and Tech.
Venayagamoorthy, Ganesh Kumar
Missouri Univ. of Science and Tech.

13:52-14:14 MoCT3.2
Dong, Shen
Tsinghua Univ.
Shi, Qixin
Tsinghua Univ.
Zhang, Lingge
Environmental Defense Fund

14:14-14:36 MoCT3.3
Ma, Xiaoliang
Royal Inst. of Tech.
Huang, Zhen
Royal Inst. of Tech.

14:36-14:58 MoCT3.4
Arterial Velocity Planning Based on Traffic Signal Information under Light Traffic Conditions (I), pp. 160-165.
Mandava, Sindhura
Univ. of California-Riverside
Boriboonsomsin, Kanok
Univ. of California-Riverside
Barth, Matthew
Univ. of California-Riverside

MoCT4
Traveler Services Information (Regular Session)

14:14-14:36 MoCT4.3
Discrepancy in Real-Time Traveler Info Websites: Traffic Condition Estimation Based on Rough Set Theory, pp. 166-171.
Liu, Hao
Res. Institute of Highway, Ministry of Transport
Zhang, Ke
Chinese National Intelligent Transport System Center of Tech.

14:14-14:36 MoCT4.3
Calibration and Validation of PARAMICS for Freeway Using Toll Data, pp. 172-177.
Li, Zhe
National ITS Res. Center, Res. Inst. of Highway, Min
Liu, Hao
Res. Institute of Highway, Ministry of Transportation
Zhang, Ke
Chinese National Intelligent Transport System Center of Tech.

14:36-14:58 MoCT4.4
Trajectory Learning and Analysis Based on Kernel Density Estimation, pp. 178-183.
Zhou, Jianying
Key Lab. of Complex Systems and Intelligence Science
Wang, Kunfeng
Inst. of Automation, Chinese Acad. of Sciences
Tang, Shuming
Inst. of Automation, Chinese Acad. of Sciences
Wang, Fei-Yue
Univ. of Arizona

MoCT5
Vehicle Assist and Automation for Bus Rapid Transit (Plenary Session)
Organizer: Zhang, Wei-Bin
Univ. of California at Berkeley

13:30-13:52 MoCT5.1
USDOT’s Demonstration and Deployment Programs on Vehicle Assist and Automation for Bus Rapid Transit (I)*.
Mortensen, Steven
FTA’s Office of Res.

13:52-14:14 MoCT5.2
GPS Guidance and Augmentation Using VPS for Transit Applications (I)*.
Shankwitz, Craig
Univ. of Minnesota

14:14-14:36 MoCT5.3
Aided Navigation, GIS, and Intelligent Roadways (II)*.
Farrell, Jay
Univ. of California-Riverside

14:36-14:58 MoCT5.4
Magnetic Guidance, GPS Guidance and the Integration of the Two for Transit Vehicle Assist and Automation (II)*.
Tan, Han-Shue
Univ. of California at Berkeley

MoDT1
Advanced Safety Systems 3 (Regular Session)

15:30-15:52 MoDT1.1
González, Álvaro
Univ. of Alcalá
Bergasa, Luis M.
Univ. of Alcalá
Gavilán Velasco, Miguel
Univ. of Alcalá
Sotelo, Miguel A.
Univ. of Alcalá
Herranz Cabrilla, Fernando
Univ. of Alcalá
Fernández Lopez, Carlos
Univ. of Alcalá

15:52-16:14 MoDT1.2
Road Surface Condition Identification Based on Statistical Pattern Recognition Method, pp. 190-195.

Deng, Weiwen
Zhao, Qingrong

General Motors Corp.
General Motors/Quartech Global Service

16:14-16:36
MoDT1.3

Vehicle Recognition and TTC Estimation at Night Based on Spotlight Pairing, pp. 196-201.

Goermer, Steffen M.
Mueller, Dennis
Hold, Stephanie
Meuter, Mirko
Kummert, Anton

Univ. of Wuppertal
Delphi Electronics & Safety
Univ. of Wuppertal
Delphi Electronics & Safety
Univ. of Wuppertal

16:36-16:58
MoDT1.4

Multi-Channel Lidar Processing for Lane Detection and Estimation, pp. 202-207.

Lindner, Philipp
Richter, Eric
Wanxik, Gerd
Takagi, Kiyokazu
Ishigai, Akira

Chemnitz Univ. of Tech.
Chemnitz Univ. of Tech.
Chemnitz Univ. of Tech.
DENSO Corp.
DENSO Autom. Deutschland GmbH

16:30-15:32
Regency B

Imaging and Image Analysis 3 (Regular Session)


Haselhoff, Anselm
Kummert, Anton

Univ. of Wuppertal
Univ. of Wuppertal

15:52-16:14
MoDT2.1


Li, Qingquan
Lei, Bo
Yu, Yang
Hou, Rui

Wuhan Univ.
Wuhan Univ.
Wuhan Univ.
South-Central Univ. for Nationals

16:14-16:36
MoDT2.2


Jang, Wonjun
Oh, Sungchan
Kim, Gyeongghan

Sogang Univ.
Sogang Univ.
Sogang Univ.

16:36-16:58
MoDT2.3

An Experiment of a 3D Real-Time Robust Visual Odometry for Intelligent Vehicles, pp. 226-231.

Rodriguez Florez, Sergio Alberto
Fremont, Vincent
Bonnifait, Philippe

Heudiasyc Lab. Univ. de Tech. de Compiègne
Univ. de Tech. de Compiègne
Univ. de Tech. de Compiègne

16:30-15:52
Grand A

ITS Operational Strategies and the Environment (Plenary Session)

Environmentally-Beneficial Intelligent Transportation Systems I)*

Barth, Matthew

Univ. of California-Riverside

15:52-16:14
MoDT3.1

The Potential Role That Transportation Systems Management and Operations Can Play in Reducing Greenhouse Gas Emissions I)*

Neudorff, Louis

Iteris, Inc.

16:14-16:36
MoDT3.2

ITS, Enabler for a Sustainable Environment -- a California PATH Program Perspective I)*

Zhang, Wei-Bin

Univ. of California at Berkeley

15:30-15:52
Grand C

Travel Behavior under ITS (Regular Session)

Analysis of Congestion Points Based on Probe Car Data, pp. 232-236.

Li, Man
Zhang, Yuhe
Wang, Wenjia

Hitachi (China) Res. & Development Corp.
Hitachi (China) Res. & Development Corp.
Hitachi (China) Res. & Development Corp.

15:52-16:14
MoDT4.1


Janney, Pranam
Geers, Donald Glenn

Univ. of New South Wales
NICTA

16:14-16:36
MoDT4.2

Vehicle Behavior Understanding Based on Movement String, pp. 243-248.

Hao, Jiuyue
Sheng, Hao
Li, Chao
Xiong, Zhang
Hussain, Eijaz

Beihang Univ.
Beihang Univ.
Beihang Univ.
Beihang Univ.
Beihang Univ.

15:30-15:52
MoDT4.3
TuAT1
Topics in ITS 1 (Regular Session)
08:30-08:52 TuAT1.1
Cortés, Francisco
Barrero, Federico
Toral-Marin, Sergio
Prieto, Joel
Guevara, Jean
Univ. of Seville
Univ. of Seville
Univ. of Seville
Univ. of Seville
Catholic Univ. of Asunción, Paraguay
08:52-09:09:14 TuAT1.2
Road Traffic Estimation with Signal Matching in Mobile Phone Using Large-Size Database, pp. 261-266.
Promnoi, Sunisa
Tangamchit, Poj
Pattara-atikom, Wasan
King's Mongkut Univ. of Tech. Thonburi
King's Mongkut Univ. of Tech. Thonburi
National Electronics and Computer Tech. Center
09:09:14-09:14:36 TuAT1.3
Biletska, Krystyna
Masson, Marie-Hélène
Deneux, Thierry
Midonet, Sophie
UMR CNRS 6599 Heudiasyc, Univ. de Tech. de Compiègne
UMR CNRS 6599 Heudiasyc and Univ. de Picardie Jules Verne
UMR CNRS 6599 Heudiasyc, Univ. de Tech. de Compiègne
INRETS (The French National Inst. for Transport and Safety R
09:14:36-09:36:58 TuAT1.4
Vaccari, Andrea
Liu, Liang
Biderman, Assaf
Ratti, Carlo
Pereira, C., Francisco
Oliverininha, Joao
Gerber, Alexandre
Massachusetts Inst. of Tech.
Massachusetts Inst. of Tech.
Massachusetts Inst. of Tech.
Univ. of Coimbra
Univ. of Coimbra
AT&T Lab. Res.

TuAT2
Vision: Surveillance (Regular Session)
08:30-08:52 TuAT2.1
Pedestrian Tracking across Panning Camera Network, pp. 279-284.
Fujimura, Kaichi
Kamijo, Shunsuke
Hyodo, Yasuhide
Inst. of Industrial Science the Univ. of Tokyo
Univ. of Tokyo
Inst. of Industrial Science the Univ. of Tokyo
08:52-09:09:14 TuAT2.2
Robert, Kostia Adrien
NICTA
09:09:14-09:14:36 TuAT2.3
Feature-Based Probabilistic Data Association (FBPDA) for Visual Multi-Target Detection and Tracking under Occlusions and Split and Merge Effects, pp. 291-298.
Grinberg, Michael
Ohr, Florian
Beyerer, Jürgen
Fraunhofer Inst. für Informations- und Datenverarbeitung
Fraunhofer Inst. Inf. & Data IITB
09:14:36-09:36:58 TuAT2.4
Somasundaram, Gunaprasad
Morellas, Vassilios
Papanikolopoulos, Nikos
Austin, Lisa
Univ. of Minnesota
Univ. of Minnesota
Minnesota Department of Transportation

TuAT3
Cooperative Systems (Regular Session)
08:30-08:52 TuAT3.1
Wei, Bing
Hong Kong Pol. Univ.
08:52-09:09:14 TuAT3.2
Experimental Characterization of DSRC Signal Strength Drops, pp. 311-315.
Miuic, Radovan
Honda R&D Americas, Inc.
09:09:14-09:36:58 TuAT3.3
van Katwijk, Ronald Theodoor
De Schutter, Bart
Hellendoorn, Hans
Delft Univ. of Tech.
Delft Univ. of Tech.

Figueiredo, Miguel
Faculty of Engineering, Univ. of Porto
Rossetti, Rosaldo
LIACC - Univ. of Porto
Braga, Rodrigo
Artificial Intelligence and Computer Science Lab.
Reis, Luís Paulo
Faculty of Engineering, Univ. of Porto

Public Transportation Management (Regular Session)

08:30-08:52 TuAT4.1
An, Jian
Tongji Univ.
Liu, Haode
Tongji Univ.
Xiaoguang, Yang
Tongji Univ.
Teng, Jing
Tongji Univ.

08:52-09:14 TuAT4.2
Gao, Lianxiong
Beijing Univ. of Posts & Telecommunications
Yunnan Nationalities
Liang, Hong
Yunnan Univ.

09:14-09:36 TuAT4.3
Monte-Carlo Bus Regulation, pp. 340-345.
Cazenave, Tristan
Univ. Paris-Dauphine
Balbo, Flavien
Univ. Paris-Dauphine
Pinson, Suzanne
Univ. Paris-Dauphine

09:36-09:58 TuAT4.4
Space and Time-Dependant Bus Accessibility: A Case Study in Rome, pp. 346-351.
Pinelli, Fabio
ISTI-CNR, PISA
Hou, Anyang
Massachusetts Inst. of Tech.
Calabrese, Francesco
Massachusetts Inst. of Tech.
Nanni, Miro
Council National Res.
Zegras, Chris
Massachusetts Inst. of Tech.
Ratti, Carlo
Massachusetts Inst. of Tech.

Intelligent Structural Health and Safety Monitoring (Special Session)

08:30-08:52 TuAT5.1
Design of a Flood Prediction System (I), pp. 352-357.
Al-Assadi, Waleed
Missouri Univ. of Science and Tech.
Gandla, Sandeep
Missouri Univ. of Science and Tech.
Sadigh, Sahra
Missouri Univ. of Science and Tech.
Dugganapally, Indira
Missouri Univ. of Science and Tech.

08:52-09:14 TuAT5.2
Recent Enhancements to the SmartBrick Structural Health Monitoring Platform (I), pp. 358-363.
Harms, Tyler
Missouri Univ. of Science and Tech.
Bastianini, Filippo
Sestosensor, Metalmobile SRL
Sadigh, Sahra
Missouri Univ. of Science and Tech.

09:14-09:36 TuAT5.3
Structural Health Monitoring and Structural Identification for Long-Span Bridges (I), pp. 364-369.
Grimmelmsman, Kirk
Univ. of Arkansas

09:36-09:58 TuAT5.4
Mitchell, Kyle
Saint Louis Univ.
Ebel, William
Saint Louis Univ.

09:36-09:58 TuAT5.5
Wu, Jingxian
Univ. of Arkansas
Smith, Scott
Univ. of Arkansas

09:36-09:58 TuAT5.6
Fonda, James W.
The Boeing Company
Watkins, Steve E.
Missouri Univ. of Science and Tech.

Collision Avoidance 1 (Regular Session)

10:30-10:52 TuBT1.1
Zhu, Tong
Tongji Univ.
Xu, Jian
Tongji Univ.
Stereovision-Based 3D Obstacle Detection for Automotive Safety Driving Assistance, pp. 394-399.

Multiple Target Detection and Tracking by Interacting Joint Probabilistic Data Association Filter and Bayesian Networks: Application to Real Data, pp. 400-407.

A Real-Time Rear View Camera Based Obstacle Detection, pp. 408-413.


A Data Fusion Based Approach for Evaluation of Material Loss in Corroded Aluminum Panels, pp. 444-449.

Advanced Occupancy Grid Techniques for Lidar Based Object Detection and Tracking, pp. 450-454.
Multi-Target Tracking for Merged Measurements of Automotive Narrow-Band Radar Sensors, pp. 455-460.

Low-Latency Indoor Localization Using Bluetooth Beacons, pp. 467-473.

Short-Term Traffic Flow Forecasting of Urban Network Based on Dynamic STARIMA Model, pp. 461-466.

Improving Digital Maps through GPS Data Processing, pp. 480-485.

An Improved AdaBoost Learning Scheme Using LDA Features for Object Recognition, pp. 486-491.

Out-Of-Sequence Measurement Processing for an Automotive Pre-Crash Application, pp. 498-503.

Full Automated Advanced Demand Signals II Scheme, pp. 522-527.

Aso, Toshimasa
Hasegawa, Takaaki

14:36-14:58
TuCT2.4

Ma, Ying-Ying
Chiu, Yi-Chang
Yang, Xiaoguang

14:36-14:58
Tongji Univ.

Multi-Sensor Fusion 2 (Regular Session)

13:30-13:52
TuCT3.1

Huang, Enyang
Antoniou, Constantinos
Wen, Yang
Ben-Akiva, Moshe
Lopes, Jorge
Bento, João

13:30-13:52
Massachusetts Inst. of Tech.
National Tech. Univ. of Athens
Massachusetts Inst. of Tech.

14:14-14:36
TuCT3.3

Lane Level Positioning Using Particle Filtering, pp. 539-544.
Selloum, Ahmed
Bétaille, David
Le Carpentier, Éric
Peyret, Francois

14:14-14:36
LCPC
Ec. Centrale de Nantes
LCPC

13:52-14:14
TuCT3.2

A Multi Sensor System to Evaluate Driving Behavior in Curves, pp. 545-549.
Hoeppken, Marc

13:52-14:14
Fraunhofer IITB

14:36-14:58
TuCT3.4

Integrity Provision for Map-Matched Positioning of Road Vehicles at Lane Level, pp. 550-555.
Toledo-Moreo, Rafael
Bétaille, David
Peyret, Francois

14:36-14:58
Univ. of Murcia 1, Tech. Univ. of Cartagena 2
LCPC
LCPC

Travel Information and Guidance 2 (Regular Session)

13:30-13:52
TuCT4.1

Towards a Route Planner Capable of Dealing with Complex Bipolar Preferences, pp. 556-561.
Mohktari, Amine
Pivert, Olivier
Hadjali, Allel
Bosc, Patrick

13:30-13:52
Irisa-Enssat
Irisa-Enssat
Irisa-Enssat
Enssat, Univ. Rennes 1

13:52-14:14
TuCT4.2

Dynamic Traffic Assignment Model Considering Drivers’ Unfamiliarity with Network Layout, pp. 562-569.
Qiao, Fengxiang
Zeng, Yan
Yu, Lei

13:52-14:14
Texas Southern Univ.
California Department of Transportation
Texas Southern Univ.

14:14-14:36
TuCT4.3

Dynamic Fastest Paths with Multiple Unique Destinations (DynFast-MUD) - a Specialized Traveling Salesman Problem with Intermediate Cities, pp. 570-575.
Miller, Jeffrey
Ali, Muhammad

14:14-14:36
Univ. of Alaska, Anchorage
Univ. of Alaska, Anchorage

14:36-15:58
TuCT4.4

Baskar, Lakshmi Dhevri
De Schutter, Bart
Hellendoorn, Hans

14:36-15:58
Delft Univ. of Tech.
Delft Univ. of Tech.
Delft Univ. of Tech.

Sen, Bipul Kumar

14:36-15:58
Univ. of Tokyo
TuDT1

**16:14-16:36 TuDT1.3**


- Fujimura, Kaichi
  - Inst. of Industrial Science the Univ. of Tokyo
- Kamijo, Shunsuke
  - Univ. of Tokyo
- Nedelevchi, Sergiu
  - Tech. Univ. of Cluj-Napoca
- Golban, Catalin
  - Tech. Univ. of Cluj-Napoca
- Mitran, Cosmin
  - Tech. Univ. of Cluj-Napoca

**16:36-16:58 TuDT1.4**

*Tracking and Detection of Lane and Vehicle Integrating Lane and Vehicle Information Using PDAF Tracking Model*, pp. 603-608.

- Hung, Ssu-Ying
  - National Taiwan Univ.
- Chan, Y-Ming
  - National Taiwan Univ.
- Lin, Bin-Feng
  - National Taiwan Univ.
- Huang, Shih-Shin
  - National Taiwan Univ.
- Hsiao, Fei-Yung
  - National Univ. of Kaohsiung
- Fu, Li-Chen
  - National Taiwan Univ.
- Nedevschi, Sergiu
  - Tech. Univ. of Cluj-Napoca
- Golban, Catalin
  - Tech. Univ. of Cluj-Napoca
- Mitran, Cosmin
  - Tech. Univ. of Cluj-Napoca

TuDT2

**15:30-15:52 TuDT2.1**

*Modeling and Signalizing Intersections for Large-Scale Transportation Simulation Network*, pp. 609-614.

- Ou, Dongxiu
  - Tongji Univ.
- Balmer, Micheal
  - ETH, Zurich, Switzerland
- Liu, Hu
  - ZTE Co. Ltd
- Shi, Lijuan
  - Tongji Univ.

**15:52-16:14 TuDT2.2**


- Chen, Li-Wen
  - National Cheng Kung Univ.
- Hu, Ta-Yin
  - National Cheng Kung Univ.

**16:14-16:36 TuDT2.3**

*Autonomous Vehicle Sequencing Algorithm at Isolated Intersections*, pp. 621-626.

- Yan, Fei
  - Univ. de Tech. de Belfort-Montbéliard
- Dridi, Mahjoub
  - Univ. de Tech. de Belfort-Montbéliard
- El Moudni, Abdellah
  - Univ. de Tech. de Belfort-Montbéliard

**16:36-16:58 TuDT2.4**

*Red Light Running Prediction for Dynamic All-Red Extension at Signalized Intersection*, pp. 627-631.

- Wang, Lanjun
  - Tsinghua Univ.
- Zhang, Liping
  - Univ. of California, Berkeley
- Zhang, Wei-Bin
  - Univ. of California, Berkeley
- Zhou, Kun
  - Univ. of California, Berkeley
- Hung, Ssu-Ying
  - National Taiwan Univ.
- Chan, Y-Ming
  - National Taiwan Univ.
- Lin, Bin-Feng
  - National Taiwan Univ.
- Huang, Shih-Shin
  - National Taiwan Univ.
- Hsiao, Fei-Yung
  - National Univ. of Kaohsiung
- Fu, Li-Chen
  - National Taiwan Univ.
- Nedevschi, Sergiu
  - Tech. Univ. of Cluj-Napoca
- Golban, Catalin
  - Tech. Univ. of Cluj-Napoca
- Mitran, Cosmin
  - Tech. Univ. of Cluj-Napoca

TuDT3

**15:30-15:52 TuDT3.1**


- Deng, Weigen
  - General Motors Corp.
- Zhao, Qingrong
  - General Motors/Quantech Global Service

**15:52-16:14 TuDT3.2**


- Ernst, Joseph M.
  - Purdue Univ.
- Ndoye, Mandoye
  - Purdue Univ.
- Krogmeier, James V.
  - Purdue Univ.
- Bullock, Darcy
  - Purdue Univ.

**16:14-16:36 TuDT3.3**


- Ndoye, Mandoye
  - Purdue Univ.
- Barker, Alan M.
  - Purdue Univ.
- Krogmeier, James V.
  - Purdue Univ.
- Bullock, Darcy
  - Purdue Univ.

**16:36-16:58 TuDT3.4**


- Cheikh, Mohamed
  - LAAS
- Tartarin, Jean Guy
  - Univ. de Toulouse, CNRS, LAAS
- David, Jacques
  - Univ. de Toulouse, CNRS, LAPLACE
- Kessler, Sebastien
  - Continental Automotive
- Morin, Alexis
  - Continental Automotive

TuDT4

**15:30-15:52 TuDT4.1**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>15:52-16:14</td>
<td>TuDT4.2</td>
<td>A Microscopic Simulation-Based Decision Support System to Develop Changeable Message Sign Alternatives</td>
<td>Wang, Jingnan, Chen, Xumei, Guo, Shuxia</td>
<td>Beijing Jiaotong Univ.</td>
</tr>
<tr>
<td>16:14-16:36</td>
<td>TuDT4.3</td>
<td>Empirical Studies of Unblocked Index for Urban Freeway Traffic Flow States</td>
<td>Sun, Dazhi, Sun, Lin, Ravola, Pranay K, Zhao, Shuai</td>
<td>Beijing Jiaotong Univ.</td>
</tr>
<tr>
<td>16:36-16:58</td>
<td>TuDT4.4</td>
<td>Prediction Aggregation of Remote Traffic Microwave Sensors Speed and Volume Data</td>
<td>Yuan, Yuming, Guan, Wei</td>
<td>Beijing Jiaotong Univ.</td>
</tr>
<tr>
<td></td>
<td>TuDT5</td>
<td>Open Source Software for High-Impact, Low-Cost ITS (Plenary Session)</td>
<td>Organizer: Havlicek, Joseph</td>
<td>Grand B</td>
</tr>
<tr>
<td>15:30-15:52</td>
<td>TuDT5.1</td>
<td>Open Source Software for Large Scale ITS Systems Integration in the National Capital Region--What Worked and What Didn’t It*</td>
<td>Pack, Michael L.</td>
<td>Univ. of Oklahoma</td>
</tr>
<tr>
<td>15:52-16:14</td>
<td>TuDT5.2</td>
<td>Traffic Counts Via Cellular Broadband Using Open Source Software (I)*</td>
<td>Refai, Hazem H.</td>
<td>Univ. of Oklahoma</td>
</tr>
<tr>
<td>16:14-16:36</td>
<td>TuDT5.3</td>
<td>Benefits and Costs from the Caltrans IRIS Open-Source Demonstration Study (I)*</td>
<td>Darter, Michael T., Lasky, Ty A., Ravani, Bahram</td>
<td>Univ. of Oklahoma</td>
</tr>
<tr>
<td>16:36-16:58</td>
<td>TuDT5.4</td>
<td>Designing the Oklahoma Statewide ITS Around Free and Open Source Software (I)*</td>
<td>Campbell, Adrian P. with Intelligent Transportation Systems Lab.</td>
<td>Univ. of Oklahoma</td>
</tr>
</tbody>
</table>

**WeAT1**

Optimization and Control: Theory and Modeling (Regular Session)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30-08:52</td>
<td>WeAT1.1</td>
<td>Hierarchical Route Choice Control for Baggage Handling Systems</td>
<td>Tarau, Alina, De Schutter, Bart, Hellendoorn, Hans</td>
<td>Delft Univ. of Tech.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>08:52-09:14</td>
<td>WeAT1.2</td>
<td>Design of Fault Tolerant Controllers in Parallel Parking Systems</td>
<td>Qu, Yizhi, Li, Lingji, Chen, Yao bin, Dai, Yaping</td>
<td>Purdue School of Engineering and Tech. IUPUI</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:14-09:36</td>
<td>WeAT1.3</td>
<td>Study on Fast Model Predictive Controllers for Large Urban Traffic Networks</td>
<td>Lin, Shu, De Schutter, Bart, Xi, Yugen, Hellendoorn, Hans</td>
<td>Shanghai Jiao Tong Univ.</td>
</tr>
</tbody>
</table>

**WeAT2**

ITS Communications (Regular Session)

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>08:30-08:52</td>
<td>WeAT2.1</td>
<td>Wireless Communication-Based Measurement of Vehicle Speed and Traffic Volume</td>
<td>Doan, Quoc Chuyen, Berradia, Tahar, Mouza, Joseph</td>
<td>ISEEM-ESIGELEC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09:14-09:36</td>
<td>WeAT2.3</td>
<td>Optimal Path in Dynamic and Stochastic Networks</td>
<td>Berradia, Tahar, Mouza, Joseph</td>
<td>RSEEM-ESIGELEC</td>
</tr>
</tbody>
</table>
Providing VANET Position Integrity through Filtering, pp. 709-714.
Yan, Gongjun Old Dominion Univ.
Chen, Xingwang Old Dominion Univ.
Olariu, Stephan Old Dominion Univ.

Blaszczyszyn, Barlomiej Ec. Normale Supérieure
Muhrenhaier, Paul INRIA
Toor, Yasser INRIA

WeAT3
Simulation and Modeling 1 (Regular Session)
08:52-09:14 WeAT3.2
An Indoor Intelligent Transportation Testbed for Urban Traffic Scenarios, pp. 721-726.
Biddlestone, Scott Ohio State Univ.
Kurt, Anda Ohio State Univ.
Vernier, Michael Ohio State Univ.
Redmill, Keith Ohio State Univ.
Ozguner, Umit Ohio State Univ.

09:14-09:36 WeAT3.3
Hu, Ta-Yin National Cheng Kung Univ.
Ho, Wei-Ming National Cheng Kung Univ.

09:36-09:58 WeAT3.4
Jradi, Walid A. R. Univ. Federal de Goiás
do Nascimento, Hugo Alexandre Dantas Univ. Federal de Goiás
Hall, Bryon Univ. Federal de Goiás
Longo, Humberto Univ. Federal de Goiás

WeAT4
Statistical Modeling (Regular Session)
08:30-08:52 WeAT4.1
Aydos, Carlos National ICT Australia, Univ. of New South Wales, Roads and Traf
Hengst, Bernhard Univ. of New South Wales
Uther, William T. B. National ICT Australia, Univ. of New South Wales

08:52-09:14 WeAT4.2
Prediction Model of Driving Behavior Based on Traffic Conditions and Driver Types, pp. 747-752.
Amata, Hideomi Nagoya Univ.
Miyaajima, Chiyomi Nagoya Univ.
Nishino, Takanori Nagoya Univ.
Kitaoka, Norihide Nagoya Univ.
Takeda, Kazuya Nagoya Univ.

09:14-09:36 WeAT4.3
Optimization Based Modeling of Multi-Service Architecture Concepts in Road Transport Telematics, pp. 753-758.
Mbibi denzuyi, Gideon Blekinge Inst. of Tech.
Persson, Jan Blekinge Inst. of Tech.
Davidsson, Paul Blekinge Inst. of Tech.

09:36-09:58 WeAT4.4
Online Travel Time Prediction Based on Boosting, pp. 759-764.
Li, Ying Georgia Inst. of Tech.
Fujimoto, Richard Georgia Inst. of Tech.
Hunter, Michael Georgia Inst. of Tech.

WeBT1
Traffic Control (Regular Session)
10:30-10:52 WeBT1.1
Priemer, Christian Univ. Hannover

10:52-11:14 WeBT1.2
Di Febraro, Angela Pol. di Torino
Giglio, Davide Univ. of Genova
Sacco, Nicola Univ. of Genova

11:14-11:36 WeBT1.3
An External Logic Processor for NTCIP-Based Traffic Controllers: Proof of Concept for Data Exchange Capability, pp. 779-784.
Abdel-Rahim, Ahmed Univ. of Idaho
Ahmed, Sk Monsur Univ. of Idaho

11:36-11:58 WeBT1.4
Distributed ITS Control and the Oklahoma Virtual TMC, pp. 785-790.
WeBT2 (Regular Session)

Topics in ITS 2

10:30-10:52  WeBT2.1
Dangerous Driving Condition Analysis in Driver Assistance Systems, pp. 791-796.
Fang, Chiung-Yao
National Taiwan Normal Univ.
Chiou, Chien Fu
National Taiwan Normal Univ.
Chen, Sei-Wang
National Taiwan Normal Univ.

11:14-11:36  WeBT2.3
Penetration of ITS Concepts at the University Level and Willingness to Their Introduction, pp. 797-802.
Santa, José
Univ. ofMurcia
Ubeda, Benito
Univ. of Murcia
Zamora-Izquierdo, Miguel A.
Univ. of Murcia
Toledo-Moreo, Rafael
Univ. of Murcia
Gomez-Skarmeta, Antonio F.
Univ. of Murcia

11:36-11:58  WeBT2.4
Observed Time-Headway Distribution and Its Implication on Traffic Phases, pp. 803-808.
He, Shuyan
Beijing Jiaotong Univ.
Guan, Wei
Beijing Jiaotong Univ.

WeBT3 (Regular Session)

Simulation and Modeling 2

10:30-10:52  WeBT3.1
Ji, Yangbeibei
Delft Univ. of Tech.

10:52-11:14  WeBT3.2
Agbolosu-Amison, Sei
Univ. of Virginia
Park, Byungkyu (Brian)
Univ. of Virginia
Yun, Ilsoo
Univ. of Virginia

11:36-11:58  WeBT3.4
Li, Zhenlong
Beijing Univ. of Tech.
Wang, Xiaoxia
Beijing Univ. of Tech.

WeBT4 (Regular Session)

Travel Demand Management

10:30-10:52  WeBT4.1
Transportation Demand Management for Beijing 2008 Olympic Games, pp. 824-829.
Su, Yuekong
Tsinghua Univ.
Lu, Lu
Tsinghua Univ.
Yao, Danya
Tsinghua Univ.
Zhang, Yi
Tsinghua Univ.
Li, Ziheng
Tsinghua Univ.
Zhang, Zuo
Tsinghua Univ.
Wang, Yangmeng
Tsinghua Univ.

10:52-11:14  WeBT4.2
Ndoye, Mandoye
Purdue Univ.
Totten, Virgil
Purdue Univ.
Krogmeier, James V.
Purdue Univ.
Bullock, Darcy
Purdue Univ.

11:14-11:36  WeBT4.3
Using 3S Technology to Estimate OD Matrix, pp. 836-841.
Deng, Bin
Tsinghua Univ.
Hu, Jianming
Tsinghua Univ.
Dai, Zhiqiang
Tsinghua Univ.
He, Li
Tsinghua Univ.
Zhang, Zuo
Tsinghua Univ.

11:36-11:58  WeBT4.4
Understanding Individual and Collective Mobility Patterns from Smart Card Records: A Case Study in Shenzhen, pp. 842-847.
Liu, Liang
Massachusetts Inst. of Tech.
Hou, Anyang
Massachusetts Inst. of Tech.
Biderman, Assaf
Massachusetts Inst. of Tech.
Ratti, Carlo
Tongji Univ.
Chen, Jun
Tongji Univ.

Book of Abstracts, pp. 848-877

Author Index