3rd International Symposium on Transport Simulation (ISTS08), Gold Coast 6-8 August 2008

Programme

MANTRA LEGENDS HOTEL
Cnr Gold Coast Highway and Laycock St
Surfers Paradise, Queensland 4217 Australia
Telephone +61 7 5588 7888
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Wednesday 6 August

8.30 – 9:45  Registration

9.45 – 10.00  Welcome

10.00 – 11.00  Session 1 Chair: Professor William Young

1  Modelling pedestrians in and around entrance points: a first concept focussing on automated revolving doors
Winnie Daamen, Serge Hoogendoorn, Henk van Wijngaarden
Delft University of Technology, Netherlands

2  Microscopic pedestrian simulation model for flow evaluation incorporating anticipatory behaviour
Miho Asano, Takamasa Iryo, Masao Kuwahara
Researcher, National Institute for Land and Infrastructure Management, Japan

11.00 – 11.30  Coffee break

11.30 – 13.00  Session 2 Chair: Dr Edward Chung

1  A lane changing model for urban arterials
Charisma F. Choudhury, Varun Ramanujam2, Moshe E. Ben-Akiva
Department of Civil and Environmental Engineering, Massachusetts Institute of Technology, USA

2  A modular tool for prediction of design choices impact on railway service dependability
Giovanni Dazzi, Pierluigi Firpo, Stefano Savio
Department of Electrical Engineering, University of Genoa – Via all’Opera Pia 11a, Genova, Italy

3  Microscopic traffic simulations towards a simulation including motorcyclists
Espié S., Bonte L., Mathieu P.
INRETS, France

13.00 – 14.30  Lunch
14.30 – 16.00  Session 3  Chair: Professor Michael A P Taylor

1 Mesoscopic simulation for transit
Tomer Toledo, Oded Cats, Wilco Burghout, Haris N. Koutsopoulos
Technion – Israel Institute of Technology, Haifa, Israel

2 Modelling public transport stops by microscopic simulation
Rodrigo Fernández
Faculty of Engineering, Universidad de los Andes, Santiago, Chile

3 Real time optimum control of railway traffic
Stefan Wegele, Roman Slovák, Eckehard Schnieder
Institute for traffic safety and automation engineering, Technical University of Braunschweig, Germany

16.00 – 16.30  Coffee break

16.30 – 18.00  Session 4  Dr Stéphane Espié

1 A macroscopic estimation method of platoons behaviours in congestion
Nicolas Chiabaut, Christine Buisson
Université de Lyon, INRETS / ENTPE, LICIT, France

2 Route switching in microscopic traffic simulation
Ir. Freek Faber, Ir. Gerdien Klunder
Delft University of Technology, Netherlands

3 Mesoscopic simulator data to perform Dynamic Origin-Destination Matrices Estimation in Urban Context
Emmanuel Bert, Edward Chung, Jaime Barcelo, André-Gilles Dumont
Traffic Facilities Laboratory (LAVOC), Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland
Thursday 7 August

9.00 – 10.30 Session 5 Chair: Dr Hadas Yuval

1 Conflict in one-lane roundabout keep the priority or keep calm
Auberlet1 J.M., Doniec2 A., Mandiau3 R.
Institut National de Recherche sur les Transports et leur Sécurité, France

2 Level crossing based on stochastic Petri nets models and social economic data
W. Zheng, J. R. Müller, R. Slovak, E. Schnieder
Braunschweig Technical University, Institute for Traffic Safety and Automation Engineering, Germany

3 Nanoscopic traffic simulation: Enhanced models of driver behaviour for ITS and telematics simulations
Hussein Dia, Sakda Panwai
Intelligent Transport Systems Research Laboratory, The University of Queensland, Australia

10.30 – 11.00 Coffee break

11.00 – 12.30 Session 6 Chair: Dr Hussein Dia

1 Transport data, models, analysis, and knowledge development
Jeffery Archer, Fotios Spiridonos, Bill Young
Monash University Accident Research Centre, Monash University, Australia

2 Synthetic household travel survey data simulation
Yongping Zhang, Abolfazl (Kouros) Mohammadian
Department of Civil and Materials Engineering University of Illinois at Chicago, USA

3 Advanced Modelling and Simulation for Transport Quality and Dependability Assessment
Eckehard Schnieder
Institute for Traffic Safety and Automation Engineering, Technical University Braunschweig, Germany

12.30 – 14.00 Lunch
14.00 – 15.30 Session 7 Chair: Dr Winnie Daamen

1 Pedestrian flow at bottlenecks validation and calibration of VISSIM’s social force model of pedestrian traffic and its empirical foundations
Tobias Kretz, Stefan Hengst, and Peter Vortisch
PTV AG, Germany

2 Exploring crowd dynamics under emergency conditions: Simulation perspectives and experiments with panicking ants
Nirajan Shiwakoti, Majid Sarvi, Geoffrey Rose, Martin Burd
Monash University, Australia

3 Pedestrian route choice self-organisation
Kardi Teknomo, Dietmar Bauer, Thomas Matyus
Ateneo de Manila University, Philippines

15.30 – 16.00 Coffee break

16.00 – 17.45 Session 8 (practitioner session) Chair: Dr Alexandre Torday
1 Traffic micro-simulation assisted underpass design
Blake Xu, Matthew Stewart
Parsons Brinckerhoff Australia, Sydney, Australia

2 Roundabout Delay Estimation with Simulation Models DRACULA, VISSIM, and SITRA-B
Mahmoud Saffarzadeh, Saber Naseralavi, Shahab Hasaninasab
Tarbiyat Modares University, Iran

3 Micro-simulation in Congested Networks
Kinnear, Simon and Read, Stephen
MWT Transport Planning, Australia

4 Singapore Kallang-Paya Lebar Expressway (KPE) Phase 1: A tunnel congestion management strategy derived using VISSIM
Dave Keenan, Maunsell, Australia

19.30 Symposium dinner

QDeck - Skylight Room
Level 78 of Q1, Surfers Paradise Blvd, Surfers Paradise
Queensland, 4217 Australia
Sponsored by GTA Consultants, Australia (www.gta.com.au)
Friday 8 August

9.00 – 10.30 Session 9 Chair: Professor Masao Kuwahara

1 Optimal coordination of public transit vehicles using operational tactics examined by simulation
Yuval Hadas, Avishai Ceder
The Interdisciplinary Department of Social Sciences, Faculty of Social Sciences, Bar-Ilan University, Israel

2 Headway and vehicle size optimisation in urban bus transit networks
Luigi dell’Olio, Angel Ibeas, Jose Luis Moura
Department of Transport, University of Cantabria, Spain

3 Approaches for modelling commercial freight traffic regarding logistics aspects
Uwe Clausen, Larissa Neumann, Ute Iddink
Dortmund University of Technology, Germany

10.30 – 11.00 Coffee break

11.00 – 12.30 Session 10 Chair: Professor Mahmoud Saffarzadeh

1 Aggregation algorithms in a vehicle-to-vehicle-to-infrastructure ITS architecture
Jeffrey Miller, Department of Computer Systems Engineering
University of Alaska, Anchorage

2 Traffic flows of adaptive cruise control vehicles on highway with an on-ramp
Rui Jiang, Mao-Bin Hu, Qing-Song Wu, Yong-Hong Wu
School of Engineering Science, University of Science and Technology of China, China

3 Prescriptive route guidance as a traffic management measure in the current state of practice
Ir. F. S. Zuurbier, Ir. A. Hegyi, Ir. S. P. Hoogendoorn, M. P. Miska
Delft University of Technology, Netherlands

4 Use of simulation-based forecast for real time traffic management decision support in the case of Madrid traffic
Alexandre Torday, Jaime Barcelo, David Garcia, Marga Delgado, Gabriel Funés
Transport Simulation Systems, Spain

12.30 – 14.00 Lunch
14.00 – 15.30 Session 11 Chair: Professor Stefano Savio

1 Travel behaviour model for traffic micro-simulation system a machine learning approach
Chong Wei, Takamasa Iryo, and Yasuo Asakura
Graduate School of Engineering, Kobe University, Japan

2 Particle-filter traffic state estimation and sequential test for real-time traffic sensor diagnosis
Jacques SAU, Nour-Eddin EL FAOUZI, Olivier de MOUZON
LMFA, laboratoire de Mécaniques des Fluides et Acoustiques, Université de Lyon, Lyon, France

3 Using an LWR model with a cell based kalman filter to estimate travel times
Department of Transport and Planning, Faculty of Civil Engineering and Geosciences, Delft University of Technology, Netherlands

15.30 – 16.00 Coffee break

16.00 – 17.00 Open forum

17.00- 17:15 Closing session