

Program Guide



ANT 2014

The 5th International Conference on Ambient Systems, Networks and Technologies



SEIT 2014

The 4th International Conference on Sustainable Energy Information Technology

June 2 - 5, 2014
Hasselt, Belgium

With Support of
Acadia University, Canada & Hasselt University, Belgium



ANT / SEIT

Symposia and Workshops

ANT	The 5 th International Conference on Ambient Systems, Networks and Technologies
SEIT	The 4 th International Conference on Sustainable Energy Information Technology
ABMTRANS	The 3 rd International Workshop on Agent-based Mobility, Traffic and Transportation Models, Methodologies and Applications
AgentCities	International Workshop on Agent-based Modeling and Simulation of Cities
ANTIFRAGILE	International Workshop "From Dependable to Resilient, from Resilient to Antifragile Ambients and Systems"
BASNet	The 2 nd International Workshop on Body Area Sensor Networks
DAAF	The 1st International Workshop on Developing and Applying Agent Frameworks
FAMS	The 4 th International Symposium on Frontiers in Ambient and Mobile Systems
ICT-SB	International Workshop Enabling ICT for Smart Buildings
IWSRON	The 2nd International Workshop on Survivable and Robust Optical Networks
RAMCOM	International Workshop on Recent Advances on Machine-to-Machine Communication
RoboSense	The 3rd International Workshop on Cooperative Robots and Sensor Networks
SPINS	International Workshop on Secure Peer-to-Peer Intelligent Networks & Systems
WNTEST	International Workshop on Wireless Networks and Energy Saving Techniques

Conference Venue:

Hasselt University, Campus Hasselt, Martelarenlaan 42, B-3500 Hasselt Belgium

Monday, June 2, 2014

Registration 16:00-18:00

Room: Panopticon or Cell

Tuesday, June 3, 2014

Registration 08:00 – 09:00

Room: Panopticon or Cell (*registration will remain open till 2:00 pm*)

Opening 09:00 - 09:15

Opening Ceremony

Room: Auditorium 2

Keynote I 09:15 - 10:00

Urban Transportation Optimization Through Smart Modelling and Policy Making for Decision Support

Atta Badii, University of Reading, UK

Session Chair: Ansar-UI-Haque Yasar, Hasselt University, Belgium

Room: Auditorium 2

Coffee Break 10:00 - 10:30

Room: Foyer

Technical Sessions 10:30 - 12:00

ANT Session 1: Agent Systems, Intelligent Computing and Applications I / Data Management I

Session Chair: Humera Farooq, Bahria University, Pakistan

Room: FR-1.01

Management of Distributed RFID Surfaces: A Cooking Assistant for Ambient Computing in Kitchen

Yoann Lebrun, Sophie Lepreux, Sylvain Haudegond, Christophe Kolski and Rene Mandiau

A New Recombination Operator for Genetic Algorithm Solution of the Quadratic Assignment Problem

Umut Tosun

A Dynamical Plan Revising for Ambient Systems

Ahmed Chawki Chaouche, Amal El Fallah Seghrouchni, Jean-Michel Ilié, Djamel Eddine Saidouni

User's Profile Ontology-Based Semantic Framework for Personalized Food and Nutrition

Recommendation

Ahmed Al-Nazer, Tarek Helmy and Mohammed Al-Mulhem

ANT Session 2: Autonomic Networks and Communications & Service Oriented Computing for Systems & Applications

Session Chair: Nicolas Gaud, UTBM, France

Room: FR-1.02

Data Lifetime Enhancement for Improving QoS in NDN

Tin-Yu Wu, Wei-Tsong Lee, Chien-Yu Duan and Yu-Wei Wu

A cross-layer loss discrimination scheme for DCCP over the wireless network

Chung-Ming Huang, Yuan-Tse Yu and Yu-Jen Huang

A new approach for service discovery and prediction on Pervasive Information System

Salma Najjar, Manuele Kirsch Pinheiro and Carine Souveyet

Semantic Annotation Tool for Annotating Arabic Web Documents

Saeed Albukhitan and Tarek Helmy

SEIT Session 1

Session Chair: Tom Bellemans, Hasselt University, Belgium

Room: FR-1.03

Modeling the soil surface temperature for natural cooling of buildings in hot climates

Mohamed Derradji and Messaoud Aiche

Numerical investigation of natural convection in air filled cubical enclosure with hot wavy surface and partial partitions

Zemani Farah, Sabeur-Bendehina Amina and Boussoufi Mustapha

Modeling Weather Impact on a Secondary Electrical Grid

Dingquan Wang, Rebecca Passonneau, Michael Collins and Cynthia Rudin

Design of an Oscillating Coil Pendulum Energy Generating System

Muhammad Musharraf Saeed, Inam Ullah Khan and Nasrullah Khan Kalair

FAMS Symposium: Session 1

Session Chair: Zahoor Khan, Dalhousie University Canada

Room: FR-1.04

Towards a distributed landmarks based approach for the localization and discovery of things on the internet

Karima Belgharbi, Mahmoud Boufaïda

On The Design Of An Intelligent Sensor Network For Flash Flood Monitoring, Diagnosis And Management In Urban Areas

M. Ancona, N. Corradi, A. Dellacasa, G. Delzanno, J.-L. Dugelay, B. Federici, P. Gourbesville, G. Guerrini, A. La Camera, P. Rosso, J. Stephens, A. Tacchella, G. Zolezzi

Policy Misuse Detection in Communication Networks with Hidden Markov Models

Umut Tosun

Evaluation OF IEEE 802.11n for Multimedia Application in VANET

Muhammad Sajjad Akbar, Muhammad Saleem Khan, Kishwer Abdul Khaliq, Amir Qayyum, Muhammad Yousaf

ABMTRANS Workshop: Session 1

Session Chair: Ansar-UI-Haque Yasar and Luk Knapen, Hasselt University, Belgium

Room: FR-1.05

Agent-Based Simulation of Drivers with the Janus Platform

Stéphane Galland, Jocelyn Buisson, Nicolas Gaud, Mikaël Gonçalves, Abderrafaa Koukam, François Guiot and Ludovic Henry

Agent-based Modelling of Real-Time Travel Information in Transit Systems

Oded Cats

The Effect of Emotional Responses on Endogenous Dynamics of Activity-Travel Behavior: Numerical Simulation Results

Ifigenia Psarra, Theo Arentze and Harry Timmermans

Investigating Activity Patterns and Time Spent for Exposure Assessment of College Campus in Korea

Jin Ki Eom, Kwang Sub Lee, Dae-Seop Moon, Duck Shin Park and Keun Yul Yang

ANTIFRAGILE Workshop: Session 1

Session Chair: Vincenzo De Florio, University of Antwerp, Belgium

Room: FR-1.06

*10:30 - 11:00 : **Workshop Keynote Speech:** Engineering Antifragile Systems: A Change in Design Philosophy (Kenny H. Jones, NASA)*

11:00 - 11:20 : Antifragility = Elasticity+Resilience+Machine Learning: Models and algorithms for open system fidelity (Vincenzo De Florio)

11:20 - 11:40 : Applying systems and safety engineering principles for antifragility (Eric Verhulst)

11:40 - 12:00 : Toward Antifragile Cloud Computing Infrastructures (Amal Abid, Mouna Khemakhem, Soumaya Marzouk, Thierry Monteil, Khalil Drira, Maher Ben Jemaa)

Lunch **12:00 - 13:30**

Room: Foyer

Technical Sessions **13:30 - 15:00**

ANT Session 3: Agent Systems, Intelligent Computing and Applications II

Session Chair: Jan Keiser, TU Berlin, Germany

Room: FR-1.01

A Comparative study on User Interfaces of Interactive Genetic Algorithm

Humera Farooq and Muhammad Tariq Siddique

A Multi Agent-Based Service Framework for Supply Chain Management

Kamalendu Pal and Bill Karakostas

Agents' Uncertainty in Argumentation-Based Negotiation: Classification and Implementation

Omar Marey, Jamal Bentahar, Ehsan Khosrowshahi Asl, Mohamed Mbarki and Rachida Dssouli

ANT Session 4: Emerging Networking, Tracking and Sensing Technologies I

Session Chair: Stephane Galland, UTBM, France

Room: FR-1.02

Localization Performance Evaluation of Extended Kalman Filter in Wireless Sensors Network

Rafiullah Khan, Sarmad Ullah Khan, Shahid Khan and Mohammad Usman Ali Khan

Loss rate control mechanism for fan-in-burst traffic in Data Center Network

Antriksh Goswami, K. K. Pattanaik, Amit Bhardwaj and Saurabh Bharti

Codebook Selection Strategies in Long-range Sub-1 GHz WLANs

Stefan Aust, Venkatesha Prasad and Ignas Niemegeers

The Coverage Configuration Protocol under AT-Dist Localization

Imen Mahjri, Amine Dhraief, Abdelfettah Belghith and Khalil Drira

SEIT Session 2

Session Chair: Amina Sabeur, Université des Sciences et de la Technologie d'Oran, Algeria

Room: FR-1.03

Determining electric vehicle charging point locations considering drivers' daily activities

Jesus Fraile-Ardanuy, Roberto Alvaro Hermana, Jairo González, Carlos Gamallo, Manuel Fuentes Gomariz, Luk Knapen and Davy Janssens

Application of Acoustic Sensing Technology for improving Building Energy Efficiency

Blaise Kelly, Danilo Hollosi, Philippe Cousin, Sergio Leal and Andrea Cavallaro

A Smart Synthetic Analysis System for Efficient Investment on Transportation Systems in Korea

Jun Lee

IT-enabled Personal-level Carbon Emission Allowance

Ichiro Satoh

FAMS Symposium: Session 2

Session Chair: Ryosuke Ando, Toyota Transportation Research Institute, Japan

Room: FR-1.04

Semantic Context-aware Adaptation Platform Architecture

Alti Adel, Sébastien Laborie, Philippe Roose

Per-hop data encryption protocol for transmitting data securely over public networks

Rajitha Tennekoon, Janaka Wijekoon, Erwin Harahap, Hiroaki Nishi

ISP Independent Architecture (IIA) for IPv6 Packet traversing and Inter-Connectivity over hybrid (IPv4/IPv6) Internet

Tariq Saraj, Muhammad Yousaf, Sajjad Akbar, Amir Qayyum, Mudassir Tufail

On defining information and communication technology requirements and associated challenges for 'energy and comfort active' buildings

Kennedy O. Aduda, Wim Zeiler, Gert Boxem, Timilehil Labeodan

ABMTRANS Workshop: Session 2

Session Chair: Ansar-UI-Haque Yasar and Luk Knapen, Hasselt University, Belgium

Room: FR-1.05

Heterogeneous tolls and values of time in multi-agent transport simulation

Kai Nagel, Benjamin Kickhöfer and Johan Joubert

Applications of TRANSIMS in transportation: A literature review

Kwang Sub Lee, Jin Ki Eom and Dae-Seop Moon

Geographical Extension of the Activity-based Modeling Framework FEATHERS

Qiong Bao, Bruno Kochan, Tom Bellemans, Davy Janssens and Geert Wets

Towards a Holistic Approach for Problems in the Energy and Mobility Domain

Marco Lützenberger, Nils Masuch, Tobias Küster, Daniel Freund, Jan Keiser, Marcus Voß, Johannes Fährdrich, Christopher-Eyk Hrabia, Denis Pozo and Frank Trollmann

ANTIFRAGILE Workshop: Session 2

Session Chair: Vincenzo De Florio, University of Antwerp, Belgium

Room: FR-1.06

13:30 - 13:50 : Toward Antifragile Cloud Computing Infrastructures (Amal Abid, Mouna Khemakhem, Soumaya Marzouk, Thierry Monteil, Khalil Drira, Maher Ben Jemaa)

13:50 - 14:10 : Bio-inspired Approaches for Engineering Antifragile Systems (Mohamed Bakhouya and Jaafar Gaber)

14:10 - 15:15 : PANEL DISCUSSION / t-Workshop on Computation Antifragility and Antifragile Engineering (Open to both "physical" participants and to Twitter users)

Coffee Break**15:00 - 15:30**

Room: Foyer

Technical Sessions**15:30 - 17:00****ANT Session 5: Internet of Things****Session Chair:** Cecilia Occhiuzzi, RADIO6ENSE, Italy**Room:** FR-1.01

NIGHT-Care: a passive RFID system for remote monitoring and control of overnight living environment

Cecilia Occhiuzzi, Carmen Vallese, Sara Amendola, Sabina Manzari and Gaetano Marrocco

An Elliptic Curve-based Mutual Authentication Scheme for RFID Implant Systems

Sanaz Rahimi Moosavi, Ethiopia Nigussie, Seppo Virtanen and Jouni Isoaho

Enabling self-learning in dynamic and open IoT environments

Arun Kishore Ramakrishnan, Davy Preuveneers and Yolande Berbers

Connecting IoT Sensors to Knowledge-Based Systems by Transforming SenML to RDF

*Xiang Su, Hao Zhang, Jukka Riekkı, Ari Keränen, Jukka Nurminen and Libin Du***ANT Session 6: Emerging Networking, Tracking and Sensing Technologies II****Session Chair:** Muhammad Raza, Dalhousie University, Canada**Room:** FR-1.02

A Weighted Linear Combining Scheme for Cooperative Spectrum Sensing

Sheeraz Akhtar Alvi, Muhammad Younis, Muhammad Imran and Fazal-E-Amin

Hybrid Live P2P Streaming Protocol

Chourouk Hammami, Imen Jemili, Achraf Gazdar, Abdelfettah Belghith and Mohamed Mosbah

Approach to Sensor Node Calibration for Efficient Localisation in Wireless Sensor Networks in Realistic Scenarios

Martin K. Mwila, Karim Djouani and Anish Kurien

A node quality based clustering algorithm in wireless mobile Ad Hoc networks

Mohamed Aissa and Abdelfettah Belghith

Performance Analysis of IPv6 QoS for Multimedia Applications using Real Testbed

*Sheneela Naz, Tariq Siraj, Muhammad Akbar, Muhammad Yousaf, Amir Qayyum and Mudassir Tufail***SPINS Workshop****Session Chair:** Al-Sakib Khan Pathan, International Islamic University Malaysia, Malaysia**Room:** FR-1.03

Mitigation of the Eclipse Attack in Chord Overlays

Cristina Rottondi, Alessandro Panzeri, Constantin Yagne, Giacomo Verticale

Analyzing the deployment of Bitcoin's P2P network under an AS-level perspective

Sebastian Feld, Mirco Schonfeld, Martin Werner

Neighborhood Failures in Random Topology Covert Communication Networks

Timothy Nix, Riccardo Bettati

Sybil nodes as a Mitigation Strategy against Sybil Attack

Zied Trifa, Maher Khemakhem

RAMCOM Workshop

Session Chair: Amine Dhraief, Manouba University, Tunisia

Room: FR-1.04

M2M Platform with Autonomic Device Management Service

Maroua Meddeb, Mahdi Ben Alaya, Thierry Monteil, Amine Dhraief and Khalil Drira

Timed Verification of Machine-to-Machine communications

Ghada Gharbi, Nawal Guermouche, Thierry Monteil

OM2M: Extensible ETSI-compliant M2M service platform with self-configuration capability

Mahdi Ben Alaya, Yassine Banouar, Thierry Monteil, Christophe Chassot and Khalil Drira

Smart Metering privacy-preserving techniques in a nutshell

Hajer Souri, Amine Dhraief, Syrine Tlili, Khalil Drira and Abdelfettah Belghith

ABMTRANS Workshop: Session 3

Session Chair: Ansar-UI-Haque Yasar and Luk Knapen, Hasselt University, Belgium

Room: FR-1.05

Open Traffic: a toolbox for traffic research

Guus Tamminga, Peter Knoppers and Hans van Lint

A Micro-Simulation Model of Updating Expected Travel Time in Provision of Travel Information: A Bayesian Belief Approach Implemented in a Multi-State Supernetwork

Zahra Parvaneh, Feixiong Liao, Theo Arentze and Harry Timmermans

Studying the accuracy of demand generation from mobile phone trajectories with synthetic data

Michael Zilske and Kai Nagel

Agent-based Simulation Testbed for On-demand Mobility Services

Michal Čertický, Michal Jakob, Radek Pibil and Zbynek Moler

Towards a social psychology-based microscopic model of driver behavior and decision-making: modifying Lewin's Field Theory

Andrew Berthaume, Matthew Romoser, Daiheng Ni and John Collura

DAAF Workshop

Session Chair: Jan Keiser, TU Berlin, Germany

Room: FR-1.06

Agent-Based Social Gaming with AMUSE

Federico Bergenti, Giovanni Caire, and Danilo Gotta

Model-Driven Development and Validation of Multi-Agent Systems in JIAC~V with the Agent World Editor

Christian Kuster, Tobias Küster, Marco Lützenberger, and Sahin Albayrak

An Agile Method for Multiagent Software Engineering

Jaschar Domann, Sindy Hartmann, Alexander Barge, Michael Burkhardt, and Sahin Albayrak

Reception

18:00-20:00

Room: Foyer

Wednesday, June 4, 2014

Keynote II

09:15 - 10:00

Energy Sector in Transformation: Understanding the Main Trends and Drivers

Gerrit Jan Schaeffer, EnergyVille, Belgium

Session Chair: Geert Wets, Hasselt University, Belgium

Room: Auditorium 2

Coffee Break

10:00 - 10:30

Room: Foyer

Technical Sessions

10:30 - 12:00

ANT Session 7: Mobile Networks, Protocols and Applications I

Session Chair: K. K. Pattanaik, Indian Institute of Information Technology & Management, India

Room: FR-0.01

Low Complexity Decoding of the 4×4 Perfect Space-Time Block Code

Elie Amani, Karim Djouani and Anish Kurien

Congestion Avoidance Hybrid Wireless Mesh Protocol (CA-HWMP) for IEEE 802.11s

Kishwer Abdul Khaliq, Sajjad Akbar, Amir Qayyum, Ehsan Elahi and Amer Zaheer

A fuzzy Approach for Call Admission Control in LTE Networks

Christophe B Tokpo Ovengalt, Karim Djouani and Anish Kurien

Quality of Clustering in mobile Ad Hoc networks

Mohamed Aissa and Abdelfettah Belghith

ANT Session 8: Modeling and Simulation in Transportation Sciences I

Session Chair: Davy Janssens, Hasselt University, Belgium

Room: FR-0.02

Modeling personal exposure to air pollution with AB²C: Environmental inequality

Evi Dons, Bruno Kochan, Tom Bellemans, Geert Wets and Luc Int Panis

Effect Analysis of Intelligent Speed Adaptation (ISA) in Advisory Mode on Community Roads

Ryosuke Ando, Tsuyoshi Ono, Fumiaki Obayashi, Yasuhiro Mimura, Kazuhiro Kozuka, Shinji Ozawa

Factors affecting performance of parametric and non-parametric models for daily traffic forecasting

Nedal T. Ratrouf and Uneb Gazde

Constrained Dynamic Control of Traffic Junctions

Dora Lee Borg and Kenneth Scerri

SEIT Session 3: Sensors for Energy Management

Session Chair: Gerrit Jan Schaeffer, EnergyVille, Belgium

Room: FR-0.03

Variable scheduling of wind-based micro-grid for electric arc furnace steel production

Dawn Domaschk and Florin Popescu

Estimating the effect of domestic load and renewable supply variability on battery capacity requirements for decentralized micro-grids

Malte Thomann and Florin Popescu

On the use of electrical humidifiers in office buildings as a demand side resource

Kennedy Aduda, Wim Zeiler, Gert Boxem and Kevin de Bont
Renewable Energy Technologies: Panacea for World Energy Security and Climate Stability?
Alexander P. Mathews

BASNet Workshop: Session 1

Session Chair: Zahoor Khan, Dalhousie University, Canada

Room: FR-0.04

Self-Organized e-Health Application using IEEE 11703: An Experimental Approach

Syed Hassan Ahmed, Asanka Sayakkara, Gwanghyeon Kim and Dongkyun Kim

LOS/NLOS Identification Based on Stable Distribution Feature Extraction and SVM Classifier for UWB On-Body Communications

Mohamed Tabaa, Camille Diou, Rachid Saadane and Abbas Dandache

Implementation of a Wearable Sensor Vest for the Safety and Well-being of Children

Mirjami Jutila, Helena Rivas, Pekka Karhula and Susanna Pantsar-Syväniemi

ICT-SB Workshop: Session 1

Session Chair: G r me Bovet, Telecom ParisTech, France

Room: FR-0.05

Will web technologies impact on building automation systems?

G r me Bovet and Jean Hennebert

Energy Harvesting - Wireless Sensor Networks for Indoors Applications using IEEE 802.11

Xenofon Fafoutis, Thomas S rensen and Jan Madsen

Using a Residential Environment Domain Ontology for Discovering and Integrating Smart Objects in Complex Scenarios

Abdaladhem Albreshne, Ayoub Ait Lahcen and Jacques Pasquier

IWSRON Workshop: Session 1

Session Chair: Ali Nafarieh and Muhammad Raza, Dalhousie University, Canada

Room: FR-0.06

Multi-Radio over Fiber Architecture for Road Vehicle Communication in VANETs

Hafiz Husnain Raza Sherazi, Imran Raza, Muhammad Hasanain Chaudary, Syed Asad Hussain and Muhammad Hassan Raza

Indirect Estimation of Link Delays by Directly Observing a Triplet of Network Metrics Strategies

Muhammad Raza, Ali Nafarieh and Bill Robertson

Table Driven Hybrid Energy-aware and SLA-based Routing Mechanism over Optical Networks

Yashar Fazili, Alireza Nafarieh and William Robertson

Lunch **12:00 - 13:30**

Room: Foyer

ANT Session 9: Mobile Networks, Protocols and Applications II / Vehicular Networks & Protocols**Session Chair:** Kenny H. Jones, NASA, USA**Room:** FR-0.01

A Quality-Aware Federated Framework for Smart Mobile Applications in the Cloud

Nayyab Zia Naqvi, Davy Preuveneers and Yolande Berbers

The Impact of the Mobile Element on Performances Improvement in Wireless Sensor Network

Yasmine Derdour, Bouabdellah Kechar and Fayçal Khelfi

Performance and Comparative Analysis of ADSA in a Vehicular Network: MAC Approach in IEEE 802.11p

Etienne Alain Feukeu, Karim Djouani and Anish Kurien

Infrastructure Cost Issues Related to Inductively Coupled Power Transfer for Electric Vehicles

*Jasprit Gill, Parth Bhavsar, Jennifer Johnson, Mashrur Chowdhury, Joachim Taiber and Ryan Fries***ANT Session 10: Modeling and Simulation in Transportation Sciences II****Session Chair:** Nedal Ratrout, KFUPM, Saudi Arabia**Room:** FR-0.02

Analysis of Pedestrian Clearance Time at Signalized Crosswalks in Japan

Miho Iryo-Asano and Wael Alhajyaseen

Canonic route splitting

Luk Knapen, Tom Bellemans, Davy Janssens and Geert Wets

Mobile agent based train control system for mitigating meet conflict at turnout

Anshul Verma and K. K. Pattanaik

Effects of using average annual daily traffic (AADT) with exogenous factors to predict daily traffic

*Nedal T. Ratrout, Uneb Gazder and El-Sayed M. El-Alfy***SEIT Session 4****Session Chair:** Kai Nagel, TU Berlin, Germany**Room:** FR-0.03

Experimental study on dehumidification/regeneration of liquid desiccant:LiBr solution

Sahila Bouzenada, A. Kaabi, Laurent Fraikin and Angelique Leonard

Asset Management of Vehicles: A Practical Application of the Logic Scoring of Preference Method of

Optimizing Programmatic Investment Decisions in a Performance Based System

Damian Kelly, Mary Lupa, Maureen Paz de Araujo and Craig Casper

Microclimate Change Outdoor and Indoor Coupled Simulation for Passive Building Adaptation Design

Choo Yoon Yi and Chengzhi Peng

Integrated analysis of commuters' energy consumption

*Daniel Röder and Kai Nagel***BASNet Workshop: Session 2****Session Chair:** Zahoor Khan, Dalhousie University, Canada**Room:** FR-0.04

Analyzing the Impact of Body Postures and Power on Communication in WBAN

Anum Talpur, Natasha Baloch, Nafeesa Bohra, Faisal Karim Shaikh, Emad Felemban

A Novel Analytical Model for Provisioning QoS in Body Area Sensor Networks

Mohsin Iftikhar and Iftikhar Ahmad

A Lightweight Middleware Platform for Distributed Computing on Wireless Sensor Networks

Salvatore Gaglio, Giuseppe Lo Re, Gloria Martorella, Daniele Peri

ICT-SB Workshop: Session 2

Session Chair: G r me Bovet, Telecom ParisTech, France

Room: FR-0.05

A multi-sensor office-building database for experimental validation and advanced control algorithm development

Nikos Zarkadis, Antonio Ridi and Nicolas Morel

Hidden Markov Models for ILM appliance identification

Antonio Ridi and Jean Hennebert

Affective interaction in smart environments

Maurizio Caon, Leonardo Angelini, Omar Abou Khaled, Denis Lalanne, Yong Yue, Elena Mugellini

IWSRON Workshop: Session 2

Session Chair: Ali Nafarieh and Muhammad Raza, Dalhousie University, Canada

Room: FR-0.06

A Comparative Study on Emission Efficient Routing Mechanisms in GMPLS Networks

Alireza Nafarieh, Yashar Fazili and William Robertson

A Comparison of Software Defined Network (SDN) Implementation Strategies

Muhammad H. Raza, Shyamala C. Sivakumar, Ali Nafarieh, Bill Robertson

A Review of QoS-based Routing Mechanisms over Shared Mesh Protected Optical Infrastructures

Ali Nafarieh, Shyamala Sivakumar, Hassan Raza, Bill Robertson

Coffee Break

15:00 - 15:30

Room: Foyer

Technical Sessions

15:30 - 17:00

ANT Session 11: Smart Environments and Applications I

Session Chair: Yolande Berbers, Katholieke Universiteit Leuven, Belgium

Room: FR-0.01

A model of assessment of collateral damage on power grids based on complex network theory

Gianni Fenu and Pier Luigi Pau

Building-Linked Location-Based Instantaneous Services System

Julian Ohrt and Volker Turau

Evaluation of Four Classifiers as Cost Function for Indoor Location Systems

Carlos Eric Galv n-Tejada, Juan Pablo Garc a-V zquez, Enrique Garc a-Ceja, Jos  C. Carrasco-Jimenez and Ramon Brena

A Threshold Based Context Change Detection in Perasive Environments: Application to a Smart Campus

Nesrine Khabou, Ismael Bouassida Rodriguez and Mohamed Jmaiel

ANT Session 12: Modeling and Simulation in Transportation Sciences III

Session Chair: Tom Bellemans, Hasselt University Belgium

Room: FR-0.02

Traffic delays estimation in two-lane highway reconstruction

Vittorio Astarita, Vincenzo Pasquale Giofr , Giuseppe Guido and Demetrio Carmine Festa

Theory and Practice in Large Carpooling Problems

Irith Hartman, Daniel Keren, Abed Abu Dbai, Elad Cohen, Luk Knapen, Ansar-Ul-Haque Yasar and Davy Janssens

A survey on the use of computational models for ex ante analysis of urban transport policy instruments

Banafsheh Hajinasab, Paul Davidsson and Jan A. Persson

Adaptive traffic speed estimation

Brian Portugais and Mandar Khanal

ANT Session 13: Distributed Systems, Networks and Applications I

Session Chair: Kenneth Scerri, University of Malta, Malta

Room: FR-0.03

Long-term activities segmentation using viterbi algorithm with k-minimum-consecutive-states Constraint

Enrique Garcia-Ceja and Ramon Brena

Undo/Redo Operations in Complex Environments

Karel Jakubec, Marek Polák, Martin Nečaský and Irena Holubova

Effect of Packet Inter-arrival Time on the Energy Consumption of Beacon Enabled MAC Protocol for Body Area Networks

Zahoor Ali Khan, Muhammad Babar Rasheed, Nadeem Javaid and Bill Robertson

ANT Session 14: Distributed Systems, Networks and Applications II

Session Chair: Ricardo Giesen, Pontificia Universidad Catolica de Chile, Chile

Room: FR-0.04

Distributed tree structure for composite physical objects

Arnab Sinha, Yann Glouche and Paul Couderc

Espresso for Rule Mining

Elhoussini F. Ashmouni, Rabie A. Ramadan and Ali A. Rashed

RoboSense Workshop

Session Chair: Anis Koubaa, Prince Sultan University, Saudi Arabia

Room: FR-0.05

Distributed Sensor Network for Multi-Robot Surveillance

Andrea Pennisi, Fabio Previtali, Francesco Ficarola, Domenico Daniele Bloisi, Luca Iocchi and Andrea Vitaletti

Exploiting multi-hop inter-beacon measurements in RO-SLAM

Arturo Torres-González, J. Ramiro Martinez-De Dios and Anibal Ollero

A Distributed Market-Based Algorithm for the Multi-Robot Assignment Problem

Sahar Trigui, Anis Koubaa, Omar Cheikhrouhou, Habib Youssef, Hachemi Bennaceur, Mohamed-Foued Sriti, Yasir Javed

WNTEST Workshop: Session I

Session Chair: Rabie A. Ramadan, Cairo University, Egypt

Room: FR-0.06

Information Gathering Schemes For Collaborative Sensor Devices

Salah A. Aly, Turki A. AlGhamdi, Mohamed Salim, Hesham H. Amin, Adnan A. Gutub

Station Reassociation Scheme for Wireless Green Networking

Kazumi Kumazoe, Daiki Nobayashi, Yutaka Fukuda and Takeshi Ikenaga

Energy saving in WSN using monitoring values prediction

Ahmed JEMAL, Marwa HACHICHA, Riadh BEN HALIMA, Ahmed HADJ KACEM, Khalil DRIRA, Mohamed JMAIEL

Finding the Best Sink Location in WSNs with Reliability Route Analysis

Marwa M. Hassan, Rabie A. Ramadan and Hatem M. El Boghdadi

Banquet and Award Ceremony 19:00-22:00

Room: Banquet Room, Holiday Inn Hasselt

Address: Kattegatstraat 1, B-3500 Hasselt

(Ask for a free route map from the reception)

Thursday, June 5, 2014

Keynote III

09:15 - 10:00

Empowering Citizens with Sustainable Transportation in the Cities of Today & Tomorrow

Davy Janssens, Hasselt University, Belgium

Session Chair: Elhadi Shakshuki, Acadia University, Canada

Room: Auditorium 3

Coffee Break

10:00 - 10:30

Room: Foyer

Technical Sessions

10:30 - 12:00

ANT Session 15: Modeling and Simulation in Transportation Sciences IV

Session Chair: Johan Holmgren, BTH, Sweden

Room: FR-0.01

The Development of Conflict Index for the Safety Assessment of Intersections Considering Crash Probability and Severity

Wael K. M. Alhajyaseen

Comparison of optimal signal plans by Synchro & TRANSYT-7F using PARAMICS- A case study

Nedal Ratrouf and Imran Reza

Combining macro-level and agent-based modeling for improved freight transport analysis

Johan Holmgren, Linda Ramstedt, Paul Davidsson, Henrik Edwards and Jan A. Persson

Using Agent-based Simulation Model for Studying Fire Escape Process in Metro Stations

S.M. Lo, W.L. Wang, S.B. Liu and J. Ma

ANT Session 16: Systems Security and Privacy I

Session Chair: Latifa Rabai, ISG Tunis, Tunisia

Room: FR-0.02

Security Analysis of Liu-Zhang-Deng Digital Signature Scheme

Chenglian Liu

Classification of security threats in information systems

Mouna Jouini, Latifa Ben Arfa Rabai and Anis Ben Aissa

LOCHA: A Light-Weight One-way Cryptographic Hash Algorithm for Wireless Sensor Network

Amrita Roy Chowdhury, Tanusree Chatterjee and Sipra Dasbit

Security Services using Crowdsourcing

Rohit Verma and Sushmita Ruj

ANT Session 17: Data Management II

Session Chair: Manuele Kirsch Pinheiro, Université Paris 1, France

Room: FR-0.03

City Intelligent Energy Network Policy based on the Big Data Analysis

Mingquan Wang, Jun Wang and Feng Tiang

Performance Improvement of Data Mining in Weka through GPU Acceleration

Tiago Engel, Andrea Schwertnaer Charao, Manuele Kirsch-Pinheiro and Luiz-Angelo Steffemel

Data Mining Strategies for Real-time Control in New York City
H. Joon Park, Patrick. H Kim, Michael Marsico and Naim Rasheed

AgentCities Workshop

Session Chair: Stephane Galland, UTBM, France

Room: FR-0.05

Multilevel Model of the 3D Virtual Environment for Crowd Simulation in Buildings

Stéphane Galland, Nicolas Gaud, Jonathan Demange, Abderrafiaa Koukam

A model of road network and buildings extension co-evolution

Merwan Achibet, Stefan Balev, Antoine Dutot, Damien Olivier

WNTEST Workshop: Session II

Session Chair: Rabie A. Ramadan, Cairo University, Egypt

Room: FR-0.06

Modified game for WSNs QoS control

Eman Elshahed, Rabie Ramadan, Shahinaz Al-Tabbakh and Hayam El-Zahed

Novel Scheme of Fuzzy Based Concealing Sink Node with Fake Holes (F-CSH)

Ahmed E. El-Din, Rabie Ramadan, Amira A. Elmagid and Salah Aly

A New Approach for Clustering in Wireless Sensors Networks Based on LEACH

Salim EL KHEDIRI, Nejah NASRI, Anne WEI, Abdennaceur KACHOURI

Lunch **12:00 – 13:30**

Room: Bluenose Ballroom

Technical Sessions **13:30 - 15:00**

ANT Session 18: Smart Environments and Applications II

Session Chair: Luiz Angelo Steffanel, Université de Reims Champagne-Ardenne, France

Room: FR-0.01

Home Appliances Coordination Scheme for Energy Management (HACS4EM) using Wireless Sensor Networks in Smart Grids

Anzar Mahmood, Ishfaq Khan, Sohail Razzaq and Nadeem Javaid

A New Scheme for Demand Side Management in Future Smart Grid Networks

Anzar Mahmood, Muhammad Naeem Ullah, Sohail Razzaq and Nadeem Javaid

ANT Session 19: Modeling and Simulation in Transportation Sciences V

Session Chair: Hoon J. Park, New York City Department of Transportation, USA

Room: FR-0.02

Bus control strategy application: case study of Santiago transit system

Pedro Lizana, Juan Carlos Munoz, Ricardo Giesen and Felipe Delgado

Integrating GIS and Feathers: A Conceptual Design

Sungjin Cho, Tom Bellemans, Davy Janssens and Geert Wets

Analyzing the Real Time Factors: Which Causing the Traffic Congestions and Proposing the Solution for Pakistani City

Wasim Hashmi Syed, Ansar-Ul-Haque Yasar, Davy Janssens and Geert Wets

ANT Session 20: Systems Security and Privacy I
Session Chair: Chenglian Liu, University of London, UK
Room: FR-0.03

Impact of Changing Parameters when Preprocessing Dorsal Hand Vein

Maleika Heenaye-Mamode Khan and Inshirah Rossan

Analysing Factors Affecting Hand Biometrics during Image Capture

Maleika Heenaye-Mamode Khan and Naushad Mamode Khan

Attacks Generation By Detecting Attack Surfaces

Samir Ouchani and Gabriele Lenzini

Social Event 15:00 – 18:00

Room: Social visit to C-mine, Genk

Transport to C-mine: Bus Trip 15:00 – 15:30

Tour in C-min: 15:30 – 17:30

Transport to Hasselt: 17:30 – 18:00

END