# ANT
Symposia and Workshops

<table>
<thead>
<tr>
<th>Abbr</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABMTRANS</td>
<td>The 2\textsuperscript{nd} International Workshop on Agent-based Mobility, Traffic and Transportation Models, Methodologies and Applications</td>
</tr>
<tr>
<td>AWS</td>
<td>The 2\textsuperscript{nd} International Workshop on the Adaptation of Web Services</td>
</tr>
<tr>
<td>BASNet</td>
<td>The International Workshop on Body Area Sensor Networks</td>
</tr>
<tr>
<td>FAMS</td>
<td>The 3\textsuperscript{rd} International Symposium on Frontiers in Ambient and Mobile Systems</td>
</tr>
<tr>
<td>IST-AWSN</td>
<td>The 8\textsuperscript{th} International Symposium on Intelligent Systems Techniques for Ad hoc and Wireless Sensor Networks</td>
</tr>
<tr>
<td>IUPT</td>
<td>The 3\textsuperscript{rd} International Workshop on Internet of Ubiquitous and Pervasive Things</td>
</tr>
<tr>
<td>IWSRON</td>
<td>International Workshop on Survivable and Robust Optical Networks</td>
</tr>
<tr>
<td>SNIGM</td>
<td>The 3\textsuperscript{rd} International Workshop on Sensor Networks for Intelligence Gathering and Monitoring</td>
</tr>
</tbody>
</table>
Tuesday, June 25, 2013

**Registration** 17:00-19:00
Room: Empress Boardroom

Wednesday, June 26, 2013

**Registration** 07:30-08:30
Room: Empress Boardroom

**Opening** 08:30-09:00
Opening Ceremony
Room: Baronet 1

**Keynote I** 09:00-10:00

*The Evolution of Information Networks around Data - Shifting Paradigms*
Hossam Hassanein, Queen's University, Kingston, Canada

Session Chair: Karim Djouani, Paris East University, France / F’SATIE, South Africa
Room: Baronet 1

**Coffee Break** 10:00-10:30
Room: Bluenose Ballroom

**Technical Sessions** 10:30-12:00

**ANT Session 1:** Emerging Networking, Tracking and Sensing Technologies I
**Session Chair:** Walid Chainbi, Sousse University, Tunisia
**Room:** Baronet 6
A QoS-aware Routing Protocol for Reliability Sensitive Data in Hospital Body Area Networks
Zahoor A. Khan, Shyamala Sivakumar, William Phillips, Bill Robertson
Stochastic MCDM Framework Over Converged Infrastructure
Sajjad Ali Mushtaq, Naheed Sajjad, Zahoor Khan
Coloring based Hierarchical Routing Approach
Dhouha Ghrab, Bilel Derbel, Imen Jemili, Amine Dhraief, Abdelfettah Belghith, El-Ghazali Talbi
Agent-based Framework for Sensor-to-Sensor Personalization
Nabil Sahli, Nafaa Jabeur, Mohamad Badra

**ANT Session 2:** Autonomic Networks and Communications
**Session Chair:** Suprakash Datta, York University, Canada
**Room:** Baronet 5
Energy Efficient Mobile Target Tracking Using Flying Drones
Dimitrios Zorbas, Tahiry Razafindralambo, Di Puglia Pugliese Luigi, Francesca Guerriero
An Optimal Cross-Layer Scheduling for Periodic WSN Applications
Tayseer Alkhdour, Uthman Baroudi, Elhadi Shakshuki, Shokri Selim
Autonomic management of the HIP-based M2M overlay network
Amine Dhraief, Abdelfettah Belghith, Khalil Drira, Tarek Bouali, Mohmaed Amine Ghorbali
Minimizing Energy Consumption in Wireless Ad hoc Networks with Meta heuristics
Ibukunola. A. Modupe, Oludayo. O. Olugbara, Abiodun. Modupe
SEIT Session 1: Energy Management in Buildings
Session Chair: Marija Milenkovic, Eindhoven University of Technology (TU/e), Netherlands
Room: Baronet 4
Sustainable Energy in Building Systems
  D. Paul Mehta, Martin Wiesehan
Estimated Thermal Load and Selecting of Suitable Air-Conditioning Systems for a Three Story Educational Building
  Hani H. Sait
Designing a Portable and Low Cost Home Energy Management Toolkit
  David V. Keyson, Abdullah Al Mahmud, Marc de Hoogh, & Rob Luxen
Implementation of IT infrastructure for model based real-time HVAC diagnostics
  C. Birk Jones, Andrea Mammoli, Larry Schuster, Hans Barsun, Richard Burnett

FAMS Symposium: Session 1
Session Chair: Ahmad Shukri Mohd Noor, Universiti Malaysia Terengganu, Malaysia
Room: Baronet 3
Autonomous Road Surveillance System: A Proposed Model for Vehicle Detection and Traffic Signal Control
  MD. Hazrat ALI, Syuhei KUROKAWA, A. A. SHAFIE
A Histogram Method for Summarizing Multi-Dimensional Probabilistic Data
  Ashraf Iqbal, Hai Wang, Qiang Gao
A New Digital Conceptual Model Oriented Corporate Memory Constructing: Taking Data Mining Models as a Case
  Choukri Djellali
Stability Visualizations as a Low-Complexity Descriptor of Network Host Behaviour
  Matt MacDonald, Carrie Gates, Teryl Taylor, Diana Paterson, Stephen Brooks

ABMTRANS Workshop: Session 1
Session Chair: Ansar-Ul-Haque Yasar and Luk Knapen, Hasselt University, Belgium
Room: Baronet 2
Passenger Agent and Paratransit Operator Reaction to Changes of Service Frequency of a Fixed Train Line
  Andreas Neumanna, Kai Nagel
Multi-Agent Transit Operations and Assignment Model
  Oded Cats
Real-time Collision Avoidance for Pedestrian and Bicyclist Simulation: A Smooth and Predictive Approach
  Jocelyn Buisson, Stephane Galland, Nicolas Gaud, Mikael Goncalves, Abderrafiaa Koukam
Agent-based Modelling and Simulation of Air Transport Technology
  D. Grether, S. Furbas, K. Nagel

Lunch 12:00 - 13:30
Room: Bluenose Ballroom

Technical Sessions 13:30 - 15:00

ANT Session 3: Emerging Networking, Tracking and Sensing Technologies II
Session Chair: Dimitrios Zorbas, Inria Lille - Nord Europe, France
Room: Baronet 6
An Approximate Approach for Area Coverage in Wireless Sensor Networks
  Haisheng Tan, Xiaohong Hao, Yuexuan Wang, Francis C.M. Lau, Yuezhou Lv
Bloom Filter Supporting Distributed Policy-Based Management in Wireless Sensor Networks  
Nidal Qwasmi, Ramiro Liscano

Energy-Efficient Optimization Layer for Event-Based Communications on Wi-Fi Things  
Gerome Bovet, Jean Hennebert

**ANT Session 4: Cloud Computing**
**Session Chair:** Tayseer Alkhdour, King Faisal University, Saudi Arabia
**Room:** Baronet 5
Experimental Evaluation of OpenStack Compute Scheduler  
Oleg Litvinski and Abdelouahed Gherbi
RobP2P: A Robust Architecture for Resource Sharing in Mobile Peer-to-Peer Networks  
Khalid Elgazzar, Walid Ibrahim, Sharief Oteafy, Hossam S. Hassanein
Implementation of Rank Based Sleep Scheduling (RBSS) Protocol for WSNs in a Fixed Grid Topology  
Tarek Sheltami, Abdul Jabbar Siddiqui, Hamza Ijaz Abbasi, Uthman Baroudi, Lahouari Ghouti

**SEIT Session 2: Efficiency in Fuel-Fired Systems**
**Session Chair:** Sebastian Manchester - Dalhousie University, Canada
**Room:** Baronet 4
A Gas-Steam Combined Cycle Powered By Syngas Derived From Biomass  
Bernardo Fortunatoa, Sergio M. Camporeale, Marco Torresi
Establishment of a Model for a Combined Heat and Power Plant with ThermosysPro Library  
Integration of an ammonia-water absorption refrigeration system with a marine Diesel engine: A thermodynamic study  
Ahmed Ouadha, Youcef El-Gotni
Performance Analysis of Oxygen Refrigerant in an LNG BOG Re-liquefaction Plant  
Boumedienne M. Beladjine, Ahmed Ouadha, Lahouari Adjlout

**FAMS Symposium: Session 2**
**Session Chair:** Stephen Brooks, Dalhousie University, Canada
**Room:** Baronet 3
Automatic Adaptation of Multimedia Documents  
Alti Adel, Sébastien Laborie, Philippe Roose
Component Based Framework to Create Mobile Cross-platform Applications  
Joachim Perchat, Mikael Desertot, Sylvain Lecomte
SOA Framework for Geriatric Remote Health Care Using Wireless Sensor Network  
Kirupa Ganapathy, Bharathi Priya, Bhanu Priya, Dhivya, V.Prashanth, V. Vaidehi

**ABMTRANS Workshop: Session 2**
**Session Chair:** Ansar-UI-Haque Yasar and Luk Knapen, Hasselt University, Belgium
**Room:** Baronet 2
Agent-based Simulation of Freight Transport Between Geographical Zones  
Johan Holmgren, Mattias Dahl, Paul Davidsson, Jan A. Persson
Transportation Model Application for the Planning of Low Carbon City -- Take Xining City in China as Example  
Mingquan WANG, LI Kexin
Agent-based Housing Market Microsimulation for Integrated Land Use, Transportation, Environment Model System  
Adam Rosenfield, Franco Chingcuanco, Eric J. Miller
Applying an Activity Based Model to Explore the Potential of Electrical Vehicles in the Smart Grid  
Fjo De Ridder, Reinhilde D’Hulst, Luk Knapen, Davy Janssens
Coffee Break  15:00 - 15:30
Room: Bluenose Ballroom

Technical Sessions  15:30 - 17:00

ANT Session 5: Emerging Networking, Tracking and Sensing Technologies III
Session Chair: Nabil Sahli, GUtech, Sultanate of Oman
Room: Baronet 6
Robust Ultra-Low-Power Algorithm for Normal and Abnormal ECG Signals Based on Compressed Sensing Theory
Mohammadreza Balouchestani, Kaamran Raahemifar and Sridhar Krishnan
The exact analysis of limited service polling systems combined with non-preemptive priority scheduling under self similar traffic input
Mutaz Beraka, Mohsin Iftikhar, Hassan Mathkour, Abdullah Bedaiwi
N. Javaid, Z. Abbas, M. S. Fareed, Z. A. Khan, N. Alrajeh
Eisa Aleisa

ANT Session 6: Vehicular Networks and Systems Security
Session Chair: Thomas Little, Boston University, USA
Room: Baronet 5
Towards Fingerprinting Malicious Traffic
Amine Boukhtouta, Noureddine Lakhdari, Serguei A. Mokhov, Mourad Debbabi
Challenges in retaining privacy in smart spaces
Jimmy C. Chaua, Thomas D.C. Little
Mohamed Rasslan
An MCS Adaptation Technique for Doppler Effect in IEEE 802.11p Vehicular Networks
E. A Feukeu, K Djouani, A Kurien
A Multi-Agent Approach For Routing On Vehicular Ad-Hoc Networks
Samira Harrabi, Walid Chainbi, Khaled Ghedira

SEIT Session 3: Special Topics
Session Chair: Wayne Groszko - Dalhousie University, Canada
Room: Baronet 4
A Categorization of Green Practices used by Dutch Data Centers
Qing Gua, Patricia Lago, Henry Muccini, Simone Potenza
Probabilistic Risk Assessment using Dynamic Flowgraph Methodology for Copper Chloride CANDU-SCWR Hydrogen Production
Fayyaz Ahmed
Influencing Factors of Methane/Moist-air Laminar Boundary Layer in Micro-channel
Jingyu Rana, Ruirui Wang, Li Zhang, Wenzhi Li, Dexiong Yang
Using Wireless Sensor Networks for Reliable Forest Fires Detection
Kechar Bouabdallah, Houache Noureddine, Sekhri Larbi

FAMS Symposium: Session 3
Session Chair: Frank Comeau, St. Francis Xavier University, Canada
Room: Baronet 3
Context-based User Stereotype Model for Mobile User Interfaces in Health Care Applications
Reem Alnanih, Olga Ormandjieva, T. Radhakrishnan
A Workload Analysis of Live Event Broadcast Service in Cloud
Yeali S. Sun, Y-F Chen, Meng Chang Chen
Towards a Distributed Plan Execution Monitoring Framework
Yosr Jarraya, Sujoy Ray, Andrei Soeanu, Mourad Debbabi, Mohamad Allouche, Jean Berger
Fail-stop failure recovery in neighbor replica environment
Ahmad Shukri Mohd Noor, Mustafa Mat Deris

**ABMTRANS Workshop: Session 3**
**Session Chair:** Ansar-Ul-Haque Yasar and Luk Knapen, Hasselt University, Belgium
**Room:** Baronet 2

- **mobiTopp – A Modular Agent-based Travel Demand Modelling Framework**
  - Nicolai Mallig, Martin Kagerbauer, Peter Vortisch
- **Simulation Model of Carpooling with the Janus Multiagent Platform**
  - Stephane Galland, Nicolas Gaud, Ansar-Ul-Haque Yasar, Luk Knapen, Davy Janssens, Olivier Lamotte
- **Freight Market Interactions Simulation (FREMIS): An Agent-Based Modeling Framework**
  - Rinaldo A. Cavalcante and Matthew J. Roorda
- **Simulation Analysis of the Market Diffusion Effects of Risk-Averse Route Guidance on Network Traffic**
  - Kaoru Yamada, Jiangshan Ma, Daisuke Fukuda
- **Computationally-Efficient Approaches to Integrating the MOVES Emissions Model with Traffic Simulators**
  - Yunjie Zhao, Adel W. Sadek

**Reception 18:00-20:00**
Room: Bluenose Ballroom
Thursday, June 27, 2013

**Keynote II 09:00 - 10:00**

*PowerShift Atlantic: Creating a Virtual Power Plant in Atlantic Canada*
Michel Losier, PowerShift Atlantic New Brunswick, Canada
Session Chair: Wayne Groszko, Dalhousie University, Canada
Room: Baronet 1

**Coffee Break 10:00 - 10:30**
Room: Bluenose Ballroom

**Technical Sessions 10:30 - 12:00**

**ANT Session 7:** Agent Systems, Intelligent Computing and Applications I
**Session Chair:** Shyamala Sivakumar, Saint Mary's University, Canada
**Room:** Baronet 6
- Dynamic Heterogeneous Team Formation for Robotic Urban Search and Rescue
  Tyler Gunn, John Anderson
- Interaction between tangible and virtual agents on interactive tables: Principles and case study
  Yoann Lebrun, Emmanuel Adam, Rene Mandiau, Christophe Kolski
- Representing and Reasoning about Utilization of Cloud Computing as Bayesian games with Epistemic Logic
  Oldooz Dianat, Mehmet A.Orgun
- An Activity-based Carpooling Microsimulation using Ontology
  Sungjin Cho, Jeon-Young Kang, Ansar-Ul-Haque Yasar, Luk Knapen, Tom Bellemans, Davy Janssens, Geert Wets, Chul-Sue Hwan

**ANT Session 8:** Distributed systems, Networks and Applications
**Session Chair:** Ridha Khedri, McMaster University, Canada
**Room:** Baronet 5
- A DNS Architecture for the Internet of Things: A Case Study in Transport Logistics
  Bill Karakostas
- Toward an FPGA Hardware Implementation of the Alamouti 4×2 Space-Time Block Coding
  Vianney Kambale, Karim Djouani, Anish Kurien
- Wireless BAN on a Bipedal Robot
  Lars Widmer, Dennis Majoe, Jurg Gutknecht
  Mohamed Amine KAFI, Yacine CHALLAL, Djamel DJENOURI, Messaoud DOUDOU, Abdelmadjid BOUABDALLAH, Nadjib BADACHE

**SEIT Session 4:** Sensors for Energy Management
**Session Chair:** Eduardo Vaz - Dalhousie University, Canada
**Room:** Baronet 4
- Design and Implementation of Smart Energy Management System for Reducing Power Consumption using ZigBee Wireless Communication Module
  Sunghoi Park, Myeong-in Choi, Byeongkwan Kang, Sehyun Park
- Recognizing energy-related activities using sensors commonly installed in office buildings
  Marija Milenkovic, Oliver Amft
- Using a thermopile matrix sensor to recognize energy-related activities in offices
  Luis Ignacio Lopera Gonzalez, Marc Troost, Oliver Amft
IST-AWSN Symposium: Session 1
Session Chair: Karim Djouani, Paris East University, France / F'SATIE, South Africa
Room: Baronet 3
Research On Indirect Cost of Irregular Flight
Xin Gu, Mingchu Li, Shuzhen Xu
Review of Parallel Decoding of Space-Time Block Codes toward 4G Wireless and Mobile Communications
Elie Amani, Karim Djouani, Anish Kurien
Maintaining Path Stability with Node Failure in Mobile Ad Hoc Networks
Abedalmotaleb Zadin and Thomas Fevens

BASNet Workshop: Session 1
Session Chair: Zahoor Khan, Dalhousie University, Canada
Room: Baronet 2
Can smartphones help with running technique?
Christina Strohrmann, Julia Seiter, Yurima Llorca, and Gerhard Troster
Electromagnetic Energy and Data Transfer in Biological Tissues using Loop Antennas
Navid Rezaei, Deysini Majumdar, Bruce Cockburn, Christian Schlegel
EDDEEC: Enhanced Developed Distributed Energy-Efficient Clustering for Heterogeneous Wireless Sensor Networks
N. Javaid, T. N. Qureshi, A. H. Khan, A. Iqbal, E. Akhtar, M. Ishfaq
T. N. Qureshi, N. Javaid, A. H. Khan, A. Iqbal, E. Akhtar, M. Ishfaq
Q-LEACH: A New Routing Protocol for WSNs
B. Manzoor, N. Javaid, O. Rehman, M. Akbar, Q. Nadeem, A. Iqbal, M. Ishfaq

Lunch 12:00 - 13:30
Room: Bluenose Ballroom

Technical Sessions 13:30 - 15:00

ANT Session 9: Emerging Networking, Tracking and Sensing Technologies IV
Session Chair: Janet Light, University of New Brunswick, Canada
Room: Baronet 6
Symmetry Reduction of Time-Triggered Ethernet Protocol
Marwan Ammar, Samir Ouchani, Otmane Ait Mohamed
Low Sampling-rate Approach for ECG Signals with Compressed Sensing Theory
Mohammadreza Balouchestani, Kaamran Raahemifar and Sridhar Krishnan
Forwarding Group Maintenance of ODMRP in MANETs
Fayez Khazalah, Ismail Ababneh, Zaki Malik
New Strategies and Extensions in Weighted Clustering Algorithms for Mobile Ad Hoc Networks
Mohamed Aissa, Abdelfettah Belghith and Khalil Drira

ANT Session 10: Smart Environments and Applications I
Session Chair: Leone Alessandro, CNR-IMM, Italy
Room: Baronet 5
Enhanced Adaptive SLA-aware Algorithms for Provisioning Shared Mesh Optical Networks
Alireza Nafarieh, Shyamala Sivakumar, William Robertson, William Phillips
Unsupervised Mining of Activities for Smart Home Prediction
Jérémy Lapalu, Kevin Bouchard, Abdenour Bouzouane, Bruno Bouchard, Sylvain Giroux
TOF Sensor Network for AAL Monitoring Services
Alessandro Leone, Giovanni Diraco, Pietro Siciliano
Towards a Real-time Error Detection within a Smart Home by Using Activity Recognition with a Shoe-mounted Accelerometer
Julien Vandewynckela, Martin Otis, Bruno Bouchard, Bob-Antoine-Jerry Ménélas, Abdenour Bouzouane

SEIT Session 5: Wind and Hydro Energy Systems
Session Chair: Wayne Groszko - Dalhousie University, Canada
Room: Baronet 4
Model-Based Fault-Tolerant Control to Guarantee the Performance of a Hybrid Wind-Diesel Power System in a Microgrid Configuration
Adriana Vargas-Martínez, Luis Ismael Minchala Avila, Youmin Zhang, Luis Eduardo Garza-Castañón, Eduardo Robinson Calle Ortiz
Compressed air Storage and Wind Energy for Time-of-Day Electricity Markets
Sebastian Manchester, Lukas Swan
Numerical Investigation of a Darrieus Rotor for Low-head Hydropower Generation
Marco Torresi, Bernardo Fortunato, Sergio M. Camporeale

IST-AWSN Symposium: Session 2
Session Chair: Francis Lau, The University of Hong Kong, Hong Kong
Room: Baronet 3
Survey on Sensor Holes: A Cause-Effect-Solution Perspective
Nafaa Jabeura, Nabil Sahli, Ijaz Muhammad Khan
An Efficient Algorithm for Finding Large Localizable Regions in Wireless Sensor Networks
Saroja Kanchi, Charles Welch
Modeling of Biological Immune System Mapped on Situation Awareness Model
Touraj Banirostama, Hossein Parvar
Performance Study of an improved Routing Algorithm in Wireless Sensor Networks
N.W. Kouassi, K. Djouani, A. Kurien

BASNet Workshop: Session 2
Session Chair: Nadeem Javaid, CAST, COMSATS IIT, Pakistan
Room: Baronet 2
Energy Consumption Rate based Stable Election Protocol (ECRSEP) for WSNs
O. Rehman, N. Javaid, B. Manzoor, A. Hafeez, A. Iqbal, M. Ishfaq
The Impact of Nodes Embedded with Data Processing Unit on Energy Consumption in a Wireless BAN
Yangqing Ai and Chiu-Sing Choy
Fast Polling Mechanism for Baseline BAN MAC (802.15.6) of Body Area Networks
Zirui Lu, Zahoor Khan, Muhammad A Iqbal
A new Coexistence Mechanism for Baseline BAN MAC (802.15.6) of Body Area Networks
Zirui Lu, Zahoor Khan, Muhammad A Iqbal
Detecting Mobility for Monitoring Patients with Parkinson’s Disease at Home Using RSSI in a Wireless Sensor Network
Suryadip Chakraborty, Saibal K Ghosh, Anagha Jamthe, Dharma P Agrawal

Coffee Break 15:00 - 15:30
Room: Bluenose Ballroom
Technical Sessions  15:30 - 17:00

ANT Session 11: Service Oriented Computing for Systems & Applications  
Session Chair: Joumana Dargham, University Of Balamand, Lebanon  
Room: Baronet 6  
Automatic Ontology-Based Annotation of Food, Nutrition and Health Arabic Web Content  
Saeed Albukhitan, Tarek Helmy  
Service-oriented Router Simulation Module Implementation in NS2 Simulator  
Janaka Wijekoon, Erwin Harahap, Hiroaki Nishi  
Software Evolution as SaaS: Evolution of Intelligent Design in Cloud  
Atif Farid Mohammad, Joumana Dargham, Hamid Mccheick, Attia T. Noor

ANT Session 12: Smart Environments and Applications II  
Session Chair: Mohamed Amine Abid, LAAS-CNRS, Tunisia  
Room: Baronet 5  
Designing a NIALM in smart homes for cognitive assistance  
Thomas Romain Camier, Sylvain Giroux, Bruno Bouchard, Abdenour Bouzouane  
Location Identification Using a Magnetic-Field-Based FFT Signature  
Carlos E. Galvan-Tejada, Jose C. Carrasco-Jimenez, Ramon Brena  
Trends and Challenges in Formal Specification and Verification of Services Composition in Ambient Assisted Living Applications  
Mohamed Hilila, Abdelghani Chibani, Karim Djouani

SEIT Session 6: Solar Energy Systems  
Session Chair: Adriana Vargas-Martinez, Concordia University, Montreal, Canada  
Room: Baronet 4  
Modeling, Simulation and Control of flat Panel Solar Collectors with Thermal Storage for Heating and Cooling Applications  
Faezeh Mosallat, Tarek ELMekkawy, Daniel Lepp Friesen, Tom Molinski, Shaun Loney, Eric L. Bibeau  
Experimental Investigation on Phase Change Material Based Thermal Energy Storage Unit  
M.J. Kabbara, N.Ben Abdallah  
Gases as Working Fluid in Parabolic Trough CSP Plants  
Roberto Cipollone, Andrea Cinocca, Angelo Gualtieri

IST-AWSN Symposium: Session 3  
Session Chair: Karim Djouani, Paris East University, France / F'SATIE, South Africa  
Room: Baronet 3  
Performance Evaluation of the IBETX Routing Metric over DSDV Routing Protocol in Wireless Ad hoc Networks  
M. S. Kabiwa, K. Djouani, A. Kurien  
M-Health: Skin Disease Analysis System Using Smartphone’s Camera  
Abderrahim Bourouis, Ali Zerdazi, Mohammed Feham, Abdelhamid Bouchachia  
Connecting Wireless Sensor Networks to the Robot Operating System  
Philipp M. Scholl, Brahim El Majoub, Silvia Santini, Kristof Van Laerhoven

AWS/IUPT Workshop  
Session Chair: Walid Chainbi, Sousse University, Tunisia  
Room: Baronet 2  
Evolution Feature Oriented Model Driven Product Line Engineering Approach for Synergistic and Dynamic Service Evolution in Clouds:Four Kinds of Schema  
Zhe Wang, Kevin Chalmers  
Architectural modifiability considerations for designing a multi-device web application platform
Heiko Desruelle, Frank Gielen
Device-Based Isolation for Securing Cryptographic Keys
Karim O. Elish, Yipan Deng, Danfeng (Daphne) Yao, Dennis Kafura
Network Storage Framework for Internet of Things
Ying Peng, Dong Xie, Ali Shemshadi

Banquet and Award Ceremony  19:00-22:00
Room: Bluenose Ballroom
**Friday, June 28, 2013**

### Technical Sessions 09:00 - 10:30

**ANT Session 13:** Mobile Networks, Protocols and Applications I  
**Session Chair:** Stephen Brooks, Dalhousie University, Canada  
**Room:** Baronet 6  
Mobility Prediction in Mobile Ad Hoc Networks Using Extreme Learning Machines  
Lahouari Ghouti, Tareq R. Sheltami, Khaled S. Alutaibi  
AdAMAC : A new MAC protocol for high traffic wireless networks  
Md. Tareq Adnan, Suprakash Datta  
Energy Constrained Positioning in Mobile Wireless Ad hoc and Sensor Networks  
Stuart MacLean, Suprakash Datta  
SARP: Synchronous Adaptive Routing Protocol for MANETs  
Mohamed Amine ABID, Abdelfettah BELGHITH, Khalil DRIRA

**ANT Session 14:** Multimodal Interfaces and Social Computing  
**Session Chair:** Frank Comeau, St. Francis Xavier University, Canada  
**Room:** Baronet 5  
LINK RECOMMENDER: Collaborative-Filtering for Recommending URLs to Twitter Users  
Nazpar Yazdanfar, Alex Thomo  
Image Stitching with Combined Moment Invariants and Sift Features  
A. Annis Fathima, R. Karthikb, V. Vaidehi  
A Formal Model of Information Retrieval Based on User Sensitivities  
Mehdi Adda  
Bridging the Gap Between the Least and the Most Influential Twitter users  
J. del Campo-Avila, N. Moreno-Vergara, M. Trella-Lopez  
AppRush: Using Dynamic Shortcuts to Facilitate Application Launching on Mobile Devices  
Chen Sun, Jun Zheng, Huiping Yao, Yang Wang, D. Frank Hsu  
Use of a 3DOF Accelerometer for Foot Tracking and Gesture Recognition in Mobile HCI  
Mahmoud Ben Brahem, Bob-Antoine J. Menelas and Martin J.-D. Otis

**ANT Session 15:** Modeling and Simulation in Transportation Sciences  
**Session Chair:** Ansar-Ul-Haque Yasar and Luk Knappen, Hasselt University, Belgium  
**Room:** Baronet 4  
Estimating scalability issues while finding an optimal assignment for carpooling  
Luk Knappen, Daniel Keren, Ansar-Ul-Haque Yasar, Sungjin Cho, Tom Bellemans, Davy Janssens, Geert Wets  
Extensible Software Design of a Multi-Agent Transport Simulation  
D. Grether, K. Nagel  
Matsuoka Neuronal Oscillator for Traffic Signal Control Using Agent-based Simulation  
F. C. Fang, W. L. Xu, K. C. Lin, F. Alamc, J. Potgieter  
An Open Extensible Platform for Intermodal Mobility Assistance  
Nils Masuch, Marco Lutzenberger, Jan Keiser  
A Micro Simulated and Demand Driven Supply Chain Model To Calculate Regional Production and Consumption Matrices  
Omar Abed, Tom Bellemans, Gerrit Janssens, Bharat Patil, Ansar Yasar, Davy Janssens, Geert Wets
IWSRON Workshop
Session Chair: Alireza Nafarieh, Hassan Raza, Dalhousie University, Canada
Room: Baronet 3
Scalable Approach to Dynamic SLA Negotiation Mechanism in Protected Shared Mesh Optical Networks
   Alireza Nafarieh, Shyamala Sivakumar, William Robertson, William Phillips
Hybrid Energy-aware and SLA-based Routing Mechanism over Optical Networks
   Yashar Fazili, Alireza Nafarieh, William Robertson
An Enhanced Bio-Inspired Trust and Reputation Model for Wireless Sensor Network
   Hosein Marzi, Mengdu Li
Localized Algorithm for Segregation of Critical/Non-critical Nodes in Mobile Ad Hoc and Sensor Networks
   Muhammad Imran, Mohamed A. Alnuemb, Mahmoud S. Fayed, Atif Alamri

SNIGM Workshop
Session Chair: Janet V. Light-Thompson, University of New Brunswick (Saint John), Canada
Room: Baronet 2
A Hierarchical Framework Using Approximated Local Outlier Factor for Efficient Anomaly Detection
   Lin Xu, Yi-Ren Yeh, Yuh-Jye Lee, Jing Li
Stealthy Health Sensing to Objectively Characterize Motor Movement Disorders
   Salvador Aguinaga, Christian Poellabauer
Deploying a Communicating Automatic Weather Station on an Alpine Glacier
   Stefano Abbate, Marco Avvenuti, Luca Carturan, Daniel Cesarini

Coffee Break 10:30 - 11:00
Room: Bluenose Ballroom

Technical Sessions 11:00 - 12:00

ANT Session 16: Mobile Networks, Protocols and Applications II
Session Chair: Alireza Nafarieh, Dalhousie University, Canada
Room: Baronet 6
Divide-and-Rule Scheme for Energy Efficient Routing in Wireless Sensor Networks
   K.Latif, A. Ahmad, N. Javaid, Z. A. Khan, N. Alrajeh
The Sky: A Social Approach to Clouds Federation
   Asma Al Falasia, Mohammed Adel Serhani, Said Elnaffar

ANT Session 17: Data Management
Session Chair: Said Elnaffar, UAE University, UAE
Room: Baronet 3
Data Encryption on GPU for High-Performance Database Systems
   Heeseung Jo, Seung-Tae Hong, Jae-Woo Chang, Dong Hoon Choi
Ad-centric Model Discovery for Predicting Ads’ Clickthrough Rate
   Zhe Gao, Qigang Gao
Semantic Query-Manipulation and Personalized Retrieval of Health, Food and Nutrition Information
   Ahmed Al-Nazer, Tarek Helmy
ANT Session 18: Agent Systems, Intelligent Computing and Applications II
Session Chair: José del Campo-Ávila, Universidad de Málaga, Spain
Room: Baronet 2

Frequent Bit Pattern Mining Over Tri-axial Accelerometer Data Streams For Recognizing Human Activities And Detecting Fall
C. Sweetlin Hemalatha, V. Vaidehi

Agent Based Health Monitoring of Elderly People in Indoor Environments Using Wireless Sensor Networks
V. Vaidehi, M. Vardhini, H. Yogeshwaran, G. Inbasagar, R. Bhargavi, C. Sweetlin Hemalatha

Gossiping Based Distributed Plan Monitoring
Andrei Soeanu, Sujoy Ray, Mourad Debbabi, Mohamad Allouche, Jean Berge