Tuesday, September 13

08:45 - 10:15
Smart Transportation I
Room: B101
Session Chairs: Abdel-Hamid Soliman (Staffordshire University, United Kingdom)
Guohui Zhang (The University of New Mexico, USA)

GHOST: A Novel Approach to Smart City Infrastructures Monitoring Through GNSS Precise Positioning
Srdjan Tadic (Bitgear, Serbia)
Alfredo Favenza (ISMB, Italy)
Christoforos Kavadias (Teletel, Greece)
Vassilis Tsagaris (Irida Labs S.A., Greece)

Investigating Vehicle-to-Vehicle Communication for Cooperative Car Parking: the CoPark Approach
Ali Aliedani (La Trobe University, Australia)
Seng W Loke (La Trobe University, Australia)
Anirudhha Desai (La Trobe University, Australia)
Prajakta Desai (La Trobe University, Australia)

The Correlation between Human Mobility and Socio-demographic in Megacity
Kaiqiang Xie (Beijing Institute of Technology, P.R. China)
Hui Xiong (Beijing Institute of Technology, P.R. China)
Chunyan Li (Beijing Transportation Research Center, P.R. China)

Impact of Green Signal Countdown Devices on Driving Behavior using Cellular Automaton Model
Kaiqiang Xie (Beijing Institute of Technology, P.R. China)
Hui Xiong (Beijing Institute of Technology, P.R. China)
Haohao Li (Beijing Institute of Technology, P.R. China)
Qingyue Pan (Beijing Institute of Technology, P.R. China)

Towards Privacy-Neutral Travel Time Estimation from Mobile Phone Signalling Data
Thierry Derrmann (University of Luxembourg / SnT, Luxembourg)
Raphaël Frank (University of Luxembourg / SnT, Luxembourg)
Sébastien Faye (University of Luxembourg, SnT, Luxembourg)
German Castignani (University of Luxembourg / SnT, Luxembourg)
Thomas Engel (University of Luxembourg / SnT, Luxembourg)

New Progress of DRIVE Net: An E-science transportation platform for data sharing, visualization, modeling, and analysis
Zhiyong Cui (University of Washington, USA)
Shen Zhang (University of Washington, USA)
Kristian C. Henrickson (University of Washington, USA)
Yinhai Wang (University of Washington, USA)

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Room: B102
Session Chairs: Daniele Fontanelli (University of Trento, Italy)
Carlo Alberto Nucci (University of Bologna, Italy)

Energy Storage System for Grid Connection and Island Operation
Rodrigo A. Alexandre (Instituto Superior Tecnico, Universidade de Lisboa, Portugal)
Sonia F. Pinto (Instituto Superior Tecnico, Universidade de Lisboa & INESC-ID, Portugal)
João J. Santana (Instituto Superior Tecnico, Universidade de Lisboa & INESC-ID, Portugal)
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  Lucas Pons (ETRA E+D, Spain)
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  Sadegh Jamali (Iran University of Science and Technology, Iran)
  Ettore Bompard (Politecnico Torino, Italy)
  Andrea Acquaviva (Politecnico di Torino, Italy)

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11:45 - 13:15
Health and Well-being Track I
Room: B102
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Lorenzo Scalise (Università Politecnica delle Marche, Italy)
An Inverse Method for Tracer Kinetic Modelling with Positron Emission Tomography (PET) using Hybrid Method

Natkunam Kokulan (University of Greenwich, United Kingdom)
Yang Hai (University of Greenwich, United Kingdom)
E. George (University of Greenwich, United Kingdom)
Choi-Hong Lai (University of Greenwich, United Kingdom)
Li Liu (Affiliated Hospital of Jiangnan University, P.R. China)

PerKApp: a Context Aware Motivational System for Healthier Lifestyles

Tania Bailoni (Fondazione Bruno Kessler, Italy)
Mauro Dragoni (Fondazione Bruno Kessler, Italy)
Claudio Eccher (Fondazione Bruno Kessler, Italy)
Marco Guerini (Fondazione Bruno Kessler, Italy)
Rosa Maimone (Fondazione Bruno Kessler, Italy)

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Session Chair: Xiao-Jun Wu (Jiangnan University, P.R. China)

Addressing exploitability of Smart City data

Enrico Daga (The Open University, United Kingdom)
Mathieu d’Aquin (The Open University, United Kingdom)
Alessandro Adamou (The Open University, United Kingdom)
Enrico Motta (The Open University, United Kingdom)

Estimating Urban Mobility with Open Data: A Case Study in Bologna

Valeria Caiati (Istituto Superiore Mario Boella, Italy)
Luca Bedogni (University of Bologna, Italy)
Luciano Bononi (University of Bologna, Italy)
Francesco Ferrero (Istituto Superiore Mario Boella, Italy)
Marco Fiore (CNR-IEIIT, Italy)
Andrea Vesco (Istituto Superiore Mario Boella, Italy)

Rights Enforcement and Licensing Understanding for RDF Stores Aggregating Open and Private Data Sets

Pierfrancesco Bellini (University of Florence, Italy)
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Filippo Betti (University of Florence, Italy)
Paolo Nesi (DSI, University of Florence, Italy)

The Well-Informed City - A Decentralized, Bottom-Up Model for a Smart City Service Using Information and Self-Organization

Eyal Feder-Levy (Tel Aviv University, Israel)
Efrat Blumenfeld-Liebertal (Tel Aviv University, Israel)
Juval Portugali (Tel Aviv University, Israel)

Block-based Realtime Big-Data Processing for Smart Cities

Dario Bonino (Istituto Superiore Mario Boella, Italy)
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Claudio Pastrone (Istituto Superiore Mario Boella, Italy)
Jose Angel Carvajal Soto (Fraunhofer Institute for Applied Information Technology FIT, Germany)
Matts Ahlsen (CNet Svenska AB, Sweden)
Mathias Axling (CNet Svenska AB, Sweden)

Integrated mass surveillance system for large scale events

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Vilmos Simon (Budapest University of Technology and Economics, Hungary)
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Session Chair: Victor M. Larios (University of Guadalajara, Mexico)

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Evertón Cavalcante (Federal University of Rio Grande do Norte, Brazil)
Adelson Dias (Federal University of Rio Grande do Norte, Brazil)
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Victor M. Larios (University of Guadalajara & CUCEA Smart Cities Innovation Center, Mexico)
Leopoldo Gomez (University of Guadalajara & CUCEA Smart Cities Innovation Center, Mexico)
Emmanuel Aceves (University of Guadalajara & CUCEA Smart Cities Innovation Center, Mexico)
Micro-interventions in urban transportation from pattern discovery on the flow of passengers and on the bus network

Carlos Caminha (University of Fortaleza, Brazil)
Vasco Furtado (University of Fortaleza, Brazil)
Vládia Pinheiro (University of Fortaleza, Brazil)
Caio Silva (University of Fortaleza, Brazil)

A Fleet Management service for Smart Cities: the S2-Move project

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Manuela Tufo (University of Sannio, Italy)
Eduard Natale (University of Naples Federico II, Italy)

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Tommaso Colombino (Xerox Research Centre Europe, France)
Antonietta Grasso (Xerox Research Centre Europe, France)
Matthieu Mazzea (University of Grenoble, France)

Towards Building Real-Time, Convenient Route Recommendation System for Public Transit

Garvita Bajaj (IIIT-Delhi, India, and Inria-Paris, France)
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Georgios Bouloukakis (Inria-Paris, France)
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Nikolaos Georgantas (Inria-Paris, France)
Valerie Issarny (Inria-Paris, France)

An algorithm for initial public transport network design over geospatial data

Maxim Shcherbakov (Volgograd State Technical University, Russia)
Alexey Golubev (Volgograd State Technical University, Russia)

Complementing Smart City Innovation Platforms with Technical Harmonization

Gorazd Marinic (iMinds-SMIT, Vrije Universiteit Brussel, Brussels, Belgium)
Nils Walravens (iMinds-SMIT, Vrije Universiteit Brussel, Brussels, Belgium)
Heritiana Ranaivoson (iMinds-SMIT, Vrije Universiteit Brussel, Brussels, Belgium)

A Framework for Thermal Parameter Identification in a Smart Buildings Context

Sigmundo Preissler, Jr (Sapienza University of Rome, Italy and Federal University of Santa Catarina, Brazil)

The Adequacy of LoRaWAN on Smart Grids: A Comparison with RF Mesh Technology

Hamilton da Gama Schroder Filho (Universidade Estadual de Campinas (UNICAMP) & CPFL Energia, Brazil)
José Pissolato Filho (Universidade Estadual de Campinas (UNICAMP), Brazil)
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15:00 - 16:30
SPECIAL SESSION: Socio-Technical Challenges in Smart City Development I
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   Gemma Odena Bultò (Enel Distribuzione, Italy)

17:00 - 18:30
SPECIAL SESSION: Low-Power Wireless Networks and Sensors for Smart Cities I
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Session Chair: Leonardo Lizzi (University Nice-Sophia Antipolis, CNRS, LEAT, France)

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   Thomas Ciarfuglia (University of Perugia, Italy)
Ambient RF Power Harvesting: Application to Remote Supply of a Batteryless Temperature Sensor

Hakim Takhedmit (Paris-Est Marne-la-Vallée University, France)

17:00 - 18:30
Health and Well-being Track II
Room: B102
Session Chairs: Li Liu (Affiliated Hospital of Jiangnan University, P.R. China)
Antoni Martinez-Balleste (Universitat Rovira i Virgili, Spain)

Two-dimensional Collaborative Filtering Approach to Wireless Channel Characterization in Medical Complex Scenarios

Fran Casino (Universitat Rovira i Virgili, Spain)
Peio Lopez Iturri (Universidad Publica de Navarra, Spain)
Erik Aguirre (Universidad Publica de Navarra, Spain)
Leyre Azpilicueta (Tecnologico de Monterrey, Mexico)
Francisco Falcone (Universidad Publica de Navarra, Spain)
Edgar Batista (Universitat Rovira i Virgili, Spain)
Agusti Solanas (Universitat Rovira i Virgili, Spain)

AUSILIA: Assisted Unit for Simulating Independent Living Activities

Tommaso Pisoni (University of Trento, Italy)
Nicola Conci (University of Trento, Italy)
Francesco G.B. De Natale (University of Trento, Italy)
Mariolino De Cecco (University of Trento, Italy)
Giandomenico Nollo (University of Trento, Italy)
Antonio Frattari (University of Trento, Italy)
Giovanni Guandalini (Azienda Provinciale per i Servizi Sanitari, Italy)

Cloud computing for s-Health and the data protection challenge: Getting ready for the General Data Protection Regulation

Rossana Ducato (University of Trento & Trento Law and Technology Research Group, Italy)

City4Age: Smart Cities for Health Prevention

Paolo Paolini (Politecnico di Milano, Italy)
Nicoletta Di Blas (Politecnico di Milano, Italy)
Sergio Copelli (MultiMed Engineers srls, Italy)
Franco Mercalli (MultiMed Engineers srls, Italy)

Social media for clinical management of neurologic diseases: an HTA approach

Emanuele Torri (Autonomous Province of Trento, Italy)
Nicola Pace (Gruppo IRCS, Fondazione Bruno Kessler & University of Trento, Italy)
Domenico Marco Bonifati (Unità Operativa Neurologia, Azienda ULSS 9 Treviso, Italy)
Giandomenico Nollo (Gruppo IRCS, Fondazione Bruno Kessler & University of Trento, Italy)

17:00 - 18:30
SPECIAL SESSION: Socio-Technical Challenges in Smart City Development II
Room: B103
Session Chairs: Mohammad Abu Matar (Etisalat British Telecom Innovation Center at Khalifa University of Science & Technology, United Arab Emirates (UAE))
Aleksas Mamkaitis (Dublin City University (DCU), Ireland)

Smart Cities and Technical Literacy for an Enlightened Citizenry and the Future

Thad B. Welch (Boise State University, USA)
Mike Montoya (Boise State University, USA)
Andrés Valdepeña Delgado (Boise State University, USA)
Towards a Software Defined Reference Architecture for Smart City Ecosystems

Mohammad Abu Matar (Etisalat British Telecom Innovation Center at Khalifa University of Science & Technology, United Arab Emirates (UAE))

Applying social norms to high-fidelity pedestrian and traffic simulations

Marco Robol (University of Trento, Italy)
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Towards Talkin’Piazza: Engaging Citizens through Playful Interaction with Urban Objects

Irene Celino (CEFRIEL - Politecnico di Milano, Italy)
Gloria Re Calegari (CEFRIEL - Politecnico di Milano, Italy)
Andrea Fiano (CEFRIEL - Politecnico di Milano, Italy)

Urban Enterprise: a review of Smart City frameworks from an Enterprise Architecture perspective

Aleksas Mamkaitis (Dublin City University (DCU), Ireland)
Marija Bezbradica (Dublin City University (DCU), Ireland)
Markus Helfert (Dublin City University (DCU), Ireland)

Sensory stimulation for human guidance in robot walkers: a comparison between haptic and acoustic solutions

Federico Moro (University of Trento, Italy)
Antonella De Angeli (University of Trento, Italy)
Daniele Fontanelli (University of Trento, Italy)
Roberto Passerone (University of Trento, Italy)
Domenico Pratichizzo (University of Siena, Italy)
Luca Rizzon (University of Trento, Italy)
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Stefano Targher (University of Trento, Italy)
Luigi Palopoli (University of Trento, Italy)

17:00 - 18:30
Smart Government Track I
Room: B104
Session Chair: Andrea Molinari (University of Trento, Italy)

Automatic Assets Identification for Smart Cities: Prerequisites for Cybersecurity Risk Assessments

Karl Waedt (AREVA GmbH, Germany)
Antonio Ciriello (AREVA GmbH, Germany)
Mithil Parekh (AREVA GmbH, Germany)
Edita Bajramovic (AREVA GmbH, Germany)

Back to public: rethinking the public dimension of institutional and private initiatives on an urban data platform

Lucia Lupi (University of Turin, Italy)
Alessio Antonini (University of Turin, Italy)
Guido Boella (University of Turin, Italy)
Claudio Schifanella (University of Turin, Italy)
Luigi Sanasi (University of Turin, Italy)

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Vincenzo D'Andrea (University of Trento, Italy)
Wednesday, September 14

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   Alessandra Flammini (University of Brescia, Italy)
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Stephane Boudaud (Abeeway, France)

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Juan Espeche (R2M Solutions, Italy)
Youssef Oualmakran (Laborelec – ENGIE, Belgium)

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SPECIAL SESSION: Decision support strategies based on wireless sensing and monitoring for smart cities management I
Room: B104
Session Chairs: Alessandro Polo (ELEDIA Research Center, University of Trento, Italy)
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Guido Benedetti (Autonomous Province of Trento, Italy)
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David Macii (University of Trento, Italy)
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Session Chairs: Andrea Molinari (University of Trento, Italy)
Xiao-Jun Wu (Jiangnan University, P.R. China)

A Big Data Analytics System to Analyze Citizens' Perception of Security

Jorge E. Camargo (Universidad Antonio Nariño, Colombia)
Carlos Torres (Secretaria de Gobierno de Bogota, Colombia)
Oscar Martinez (Secretaria de Gobierno de Bogota, Colombia)
Francisco Gomez (Universidad Nacional de Colombia, Colombia)

Expenditure, Revenue and Taxes - Towards a Standard for Representing City Finance Open Data

Zhongxiu Wang (University of Toronto, Canada)
Mark Fox (University of Toronto, Canada)

Social Smart City: A Platform to Analyze Social Streams in Smart City Initiatives

Arthur Souza (Federal University of Rio Grande do Norte, Brazil)
Mickael Figueredo (Federal University of Rio Grande do Norte, Brazil)
Nélio Cacho (Federal University of Rio Grande do Norte, Brazil)
Daniel Araújo (Federal University of Rio Grande do Norte, Brazil)
Jazon Coelho (Federal University of Rio Grande do Norte, Brazil)
Carlos A. Prolo (Federal University of Rio Grande do Norte, Brazil)

FPVI: A Scalable Method for Discovering Privacy Vulnerabilities in Microdata

Aris Gkoulalas-Divanis (IBM Research, Ireland)
Stefano Braghin (IBM Research, Ireland)
Spiros Antonatos (IBM Research, Ireland)

A Framework for IoT Service Experiment Platforms in Smart-City Environments

Mervi Hämäläinen (University of Jyväskylä, Finland)
Pasi Tyrväinen (University of Jyväskylä, Finland)

11:45 - 13:15
SPECIAL SESSION: Decision support strategies based on wireless sensing and monitoring for smart cities management II
Room: B104
Session Chairs: Alessandro Polo (ELEDIA Research Center, University of Trento, Italy)
Federico Viani (ELEDIA@UniTN - University of Trento, Italy)

Optimization Strategies for Fleet Management based on Wireless Terminals Localization in Smart Cities Scenarios

Alessandro Polo (University of Trento & ELEDIA Research Center, Italy)
Federico Viani (University of Trento & ELEDIA Research Center, Italy)
Fabrizio Robol (University of Trento & ELEDIA Research Center, Italy)
Andrea Massa (University of Trento & ELEDIA Research Center, Italy)
Silvia Marchesi (CUE - Autonomous Province of Trento, Italy)
Luisa Zappini (CUE - Autonomous Province of Trento, Italy)
### Experimental Validation of a Wireless Distributed System for Smart Public Lighting Management

Federico Viani (University of Trento & ELEDIA Research Center, Italy)
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Enrico Giarola (University of Trento & ELEDIA Research Center, Italy)
Adamo Ferro (Municipality of Trento, Italy)

### A Cross-Layer Framework for Sensor Data Aggregation for IoT Applications in Smart Cities

Abrar Alkhamisi (King Abdulaziz University, Saudi Arabia)
Mohamed Saleem Haja Nazmudeen (Universiti Teknologi Brunei, Brunei Darussalam)
Seyed M. Buhari (King Abdulaziz University, Saudi Arabia)

### SPArTaCuS: Service Priority Adaptiveness for Emergency Traffic in Smart Cities using Software-Defined Networking

Rohit Abhishek (University of Missouri-Kansas City, USA)
Shuai Zhao (University of Missouri-Kansas City, USA)
Deep Medhi (University of Missouri-Kansas City, USA)

### Next Generation Zero-power RFID-tag for UWB Pervasive Identification

Diego Masotti (DEI, University of Bologna, Italy)
Marco Fantuzzi (DEI, University of Bologna, Italy)
Alessandra Costanzo (DEI, University of Bologna - Cesena Campus, Italy)

15:00 - 16:30
**Smart Transportation IV**
**Room:** B101
**Session Chairs:** Yinhai Wang (University of Washington, USA)
Guohui Zhang (The University of New Mexico, USA)

### Video Analysis for Yellow Box Junction Violation: Requirements, Challenges and Solutions

Rami Alkhawaji (Staffordshire University, United Kingdom)
Mohamed Sedky (Staffordshire University, United Kingdom)
Abdel-Hamid Soliman (Staffordshire University, United Kingdom)

### Incentivization Schemes for Vehicle Allocation in One-Way Vehicle Sharing Systems

Alexandros Angelopoulos (National Technical University of Athens & Computer Technology Institute and Press "Diophantus", Greece)
Damianos Gavalas (University of Aegean and Computer Technology Institute & Press “Diophantus”, Greece)
Charalampos Konstantopoulos (University of Piraeus, Greece)
Damianos Kyriiadi (University of Athens & Computer Technology Institute and Press "Diophantus", Greece)
Grammati Pantziou (Technological Educational Institution of Athens & Computer Technology Institute and Press "Diophantus", Greece)

### Autoregressive Dynamic Mechanism for Urban Area Microscopic Traffic Flow Models

Felipe Tejada (Universidad de Chile, Chile)
Claudio Estevez (Universidad de Chile, Chile)
Aleksjejs Zacepins (Latvia University of Agriculture, Latvia)
Vitalijs Komasilovs (Latvia University of Agriculture, Latvia)

### A scheduling optimization model for minimizing the energy demand of a building using electric vehicles and a micro-turbine

Dimitrios Thomas (University of Mons, Belgium)
Olivier Deblecker (University of Mons, Belgium)
Ali Bagheri (University of Mons, Belgium)
Christos S. Ioakimidis (University of Mons, Belgium)

### Stochastic optimization of public transport schedules to reduce transfer waiting times

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15:00 - 16:30
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Room: B102
Session Chairs: Li Liu (Affiliated Hospital of Jiangnan University, P.R. China)
Giandomenico Nollo (University of Trento, Italy)

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Marirosario Prist (Università Politecnica delle Marche, Italy)
Sauro Longhi (Università Politecnica delle Marche, Italy)
Loreto Pescosolido (University of Rome "La Sapienza", Italy)

15:00 - 16:30
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Tanguy Coenen (Free University of Brussels - iMinds, Belgium)
Pieter Ballon (Free University of Brussels - iMinds, Belgium)

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IRENE Workshop - Resilient and Secure Urban Power Systems (Workshop 4)
Room: B104
Session Chairs: Andrea Ceccarelli (University of Florence, Italy)
Oliver Jung (AIT Austrian Institute of Technology GmbH, Austria)
Eng Tseng Lau (Queen Mary University of London, United Kingdom)

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