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(ITST 2011)

**St. Petersburg, Russia
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Program

Tuesday, August 23

Conference opening

Mr. Albert Efimov "Information and Computer Technology Cluster of Skolkovo Foundation"

Keynote by Dr. Russell Hsing and Dr. Piotr Szczechowiak "Vehicular Networks and Telematics Applications: Next ICT industry for the knowledge-based economy"

Coffee break

Keynote by Dr. Werner Mohr "ICT research cooperation without Borders"

Keynote by Dr. Wolfgang Steinicke "Intelligent Mobility - Key Technologies to make EC White Paper on Transport come true"

Mr. Yuri Chizhkov "Intelligent Transport Systems (ITS) and Safety of Automobile Transport"

Lunch

S1: VANET I

An Embedded VDTN Testbed for the Evaluation of Vehicular Safety Systems

Maicke Paula (Institute of Telecommunications, University of Beira Interior, Fiat Automobile, Brazil); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Dias (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Isento (Instituto de Telecomunicações, University of Beira Interior, Portugal); Lei Shu (Osaka University, Japan)
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Replica Voting based Architectures for Reliable Data Dissemination in Vehicular Networks

Kaliappa Ravindran (City University of New York, USA)
pp. 7-14

Dissemination Protocols to Support Cooperative Adaptive Cruise Control (CACC) Merging

Wouter Klein Wolterink (University of Twente, The Netherlands); Geert Heijenk (University of Twente, The Netherlands); Georgios Karagiannis (University of Twente, The Netherlands)
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Approximation of the IEEE 802.11p Standard Using Commercial Off-The-Shelf IEEE 802.11a Hardware

Wim Vandenberghe (Ghent University – IBBT, Belgium); Ingrid Moerman (Ghent University - IBBT, Belgium); Piet Demeester (Ghent University, Belgium)
pp. 21-26

S2: Routing

Traffic Monitoring and Routing in VANETs - A Cluster Based Approach

Venkata Manoj D (Manipal Institute of Technology, India); Manohara Pai (Manipal Institute of Technology, Manipal University, India); Radhika Pai (Manipal Institute of Technology, India); Joseph Mouzna (Esigelec-Irseem, France)
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Routing Packets to Distant Locations in VANETs

Khaleel W Mershad (American University of Beirut, Lebanon); Hassan A. Artail (American University of Beirut, Lebanon); Haidar Safa (American University of Beirut, Lebanon)
pp. 33-38

Evaluation of Ad-hoc routing protocols in Vehicular Ad-hoc Network using OPNET

Xiaozhou Fang (Beijing University of Posts and Telecommunications, P.R. China); Kok Keong Chai (Queen Mary, University of London, United Kingdom); Yasir Alfadhl (Queen Mary University of London, United Kingdom); Yan Sun (Queen Mary, University of London, United Kingdom)
pp. 39-44

Performance evaluation of a Tree-Based Routing and Address Autoconfiguration for Vehicle-to-Internet Communications

Marco Gramaglia (IMDEA Networks, Spain); Carlos J. Bernardo (Universidad Carlos III de Madrid, Spain); Maria Calderon (Universidad Carlos III de Madrid, Spain); Antonio de la Oliva (Universidad Carlos III de Madrid, Spain)
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S25: Miscellaneous I

Data Association Techniques for Advanced Driver Assistance Systems using Embedded Soft-core Processors

Jehangir Khan (IFSTTAR, LESTO, France); Charles Tatkeu (IFSTTAR, LESTO & Univ Lille Nord de France, France); Pascal Deloof (IFSTTAR, LESTO, France); Smail Niar (Université de Valenciennes et du Hainaut-Cambr, France)
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Shortest Paths and Probabilities on Time-Dependent Graphs - Applications to Transport Networks

Sébastien Félix (I3S-Mascotte CNRS-INRIA-UNS and Orange Labs, France); Jérôme Galtier (France Telecom R&D, France)
pp. 56-62

iParking: a Parking Management Framework

Jatuporn Chinrungrueng (Nectec, Thailand); Songphon Dumnin (Nectec, Thailand); Ronachai Pongthornseri (Nectec, Thailand)
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Velocity Decision Algorithm for Platooning based on Converging Sequence and Converging Possibility

Taisei Tokuda (Keio University, Japan); Masaki Suzuki (Keio University, Japan); Shohei Kanda (Keio University, Japan); Hiroshi Shigeno (Keio University, Japan)
pp. 69-74

S3: Channel modeling

A Validated 5.9 GHz Non-Line-Of-Sight Path-Loss and Fading Model for Inter-Vehicle Communication

Thomas Mangel (BMW Group Research and Technology, Germany); Oliver Klemp (BMW Group Research and Technology, Germany); Hannes Hartenstein (Karlsruhe Institute of Technology, Germany)
pp. 75-80

Radio Wave Propagation in Curved Rectangular Tunnels at 5.8 GHz for Metro Applications

Emilie Masson (IFSTTAR, LEST & Univ Lille Nord de France, France); Yann Cocheril (IFSTTAR, France); Pierre Combeau (XLIM University of Poitiers, France); Lilian Aveneau (University of Poitiers, France); Marion Berbineau (IFSTTAR, LEST & University Lille Nord de France, France); Rodolphe Vauzelle (IRCOM SIC University of Poitiers, France); Etienne Fayt (ALSTOM-TIS, France)
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On the Simulation of Weibull Fading for V2X Communications

Iulia Ivan (IETR & Renault sas, France); Philippe Besnier (IETR, France); Xavier Bunlon (Renault sas, France); Lois Le Danvic (Renault, France); M'hamed Drissi UEB (INSA of Rennes, France)
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Second order statistics of selection macro-diversity system operating over Gamma shadowed Ricean fading channels

Stefan Panić (University of Niš & University of Priština, Serbia); Dragana Krstić (University of Niš, Serbia); Mihajlo Stefanović (University of Nis, Serbia); Sinisa Minić (Teachers College in Prizren - Leposavic, Serbia)
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Coffee break

S19: Human Factors

Study on Psychosomatic Features of Driver's Distraction Based on Pattern Recognition

Masahiro Miyaji (Aichi Prefectural University, Japan); Haruki Kawanaka (Aichi Prefectural University, Japan); Koji Oguri (Aichi Prefectural University, Japan)
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EWMA Based Classification of Driver State

Valeriy Naumov (University of Oulu, Finland)
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Social-based Traffic Information Extraction and Classification

Napong Wanichayapong (National Electronics and Computer Technology Center, Thailand); Wasawat Pruthipunyaskul (National Science and Technology Development Agency, Thailand);

Wasan Pattara-Atikom (National Electronic and Computer Technology Center (NECTEC), Thailand); Pimwadee Chaovalit (National Science and Technology Development Agency, Thailand)
pp. 107-112

S4: VANET II

VANET: Is 95% Probability of Packet Reception safe?

Natalya An (Karlsruhe Institute of Technology (KIT), Germany); Tristan Gaugel (Karlsruhe Institute of Technology (KIT), Germany); Hannes Hartenstein (Karlsruhe Institute of Technology, Germany)
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Efficient Dynamic Scheduling Scheme between Vehicles and Roadside Units based on IEEE 802.11p/WAVE Communication Standard

Teng Jiang (Beijing University of Posts and Telecommunications, P.R. China); Yasir Alfadhl (Queen Mary University of London, United Kingdom); Kok Chai (Queen Mary, University of London, United Kingdom)
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Roadside and Moving WAVE Providers: Effectiveness and Potential of Hybrid Solutions in Urban Scenarios

Claudia Campolo (University "Mediterranea" of Reggio Calabria, Italy); Hector Agustin Cozzetti (Istituto Superiore Mario Boella, Italy); Antonella Molinaro (University "Mediterranea" of Reggio Calabria, Italy); Riccardo M. Scopigno (Istituto Superiore Mario Boella, Italy)
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Performance Analysis of Broadcast Protocols in VANETs with Poisson Vehicle Distribution

Stefano Busanelli (University of Parma, Italy); Gianluigi Ferrari (University of Parma, Italy); Roberto Gruppini (University of Parma, Italy)
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S5: ITS I

Estimation of Fuel Flow for Telematics-Enabled Adaptive Fuel and Time Efficient Vehicle Routing

Ilya Kolmanovsky (University of Michigan, USA); Kevin McDonough (University of Michigan, USA); Oleg Gusikhin (Ford, USA)
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Intelligent Transportation Systems based on Internet-Connected Vehicles: Fundamental Research Areas and Challenges

George Dimitrakopoulos (Harokopion University of Athens, Greece)
pp. 145-151

Virtual Police Agents for ITS Traffic Routing

Arturo Gomez (University of Paris 13 & Institut Galilee, France); Gladys Diaz (University of Paris 13 & L2TI, Institut Galilee, France); Khaled Boussetta (University of Paris 13, France)
pp. 152-157

Dynamic Traffic Information Sharing for Public Development and Application of ITS

Wei Du (Southwest Jiaotong University, P.R. China); Wei Chen (Southwest Jiaotong University, P.R. China)

S6: PHY I

An Improved Adaptive Modulation Scheme for Closed-Loop MIMO Transmission in Tunnel Environments

Imade Fatani (Université Lille Nord de France, UVHC, IEMN DOAE & UVHC, Valenciennes, France); Yann Cocheril (IFSTTAR, France); François-Xavier Coudoux (University of Valenciennes, France); Marie Zwingelstein-Colin (University of Valenciennes, France); Mohamed Gharbi (Iemn/Doae Umr Crns, France); Crépin Nsiala (Institut National de REcherche sur le Transport et leur Sécurité, France); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France)

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A Study on Combining Location Oriented PN code Allocation with Successive Interference Cancellation for IVC

Satoshi Ogata (Tokyo University of Science, Japan); Kohei Ohno (Tokyo University of Science, Japan); Makoto Itami (Tokyo University of Science, Japan)

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Optimal Duration Five Bit Orthogonal Chaotic Vector Shift Keying Communication: A Case Study

Timothy Wren (University of Sussex & MathTech Consultants Limited, United Kingdom); Tai Yang (Reader in Computer and Control Engineering, United Kingdom)

pp. 174-180

Adaptive Resource Allocation for OFDMA Systems under Peak Power Constraint

Yunxin (Jeff) Li (NICTA & University of Sydney, Australia); Hugh Durrant-Whyte (University of Sydney, Australia); Rob Evans (The University of Melbourne, Australia)

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Welcome reception / Ship tour

Wednesday, August 24

Dr. Thierry Goger "Strengthening research activities within transport and urban development area: a challenge for the European COOperation in the field of Scientific and Technical Research (COST)"

Keynote by Prof. Riku Jäntti "Cognitive radio - an opportunity and challenge for intelligent transportation systems"

Coffee break

RABAN Workshop, Invited Talk

Analysis of Multiple Antenna Transmission for HSUPA

Roman Maslennikov (The University of Nizhny Novgorod, Russia); Alexey Trushanin (Lobachevsky State University of Nizhny Novgorod, Russia); Mikhail Shkerin (Lobachevsky State University of Nizhny Novgorod, Russia); Michael Shashanov (Lobachevsky State University of Nizhny Novgorod, Russia); Przemysław J Czerepiński (Nokia Siemens Networks, Poland)
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TRxITS Workshop

A Reduced-Complexity Multi-user MIMO Precoding Scheme with Sorted-QR Decomposition and Block-based Power Allocation

Chih-Hsiang Lin (National Central University, Taiwan); Pei-Yun Tsai (National Central University, Taiwan)
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Modified CMA Method and Implementation for Time-Varying OFDM Channel Estimation

Dah-Chung Chang (National Central University, Taiwan); Chia-Mu Wu (NCU, Taiwan); Chi-Sheng Lin (National Central University, Taiwan)
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Distributed Algorithm of Subgradient Optimization for Localization Based on Received Signal Strength in Wireless Network

Pei-Yun Tsai (National Central University, Taiwan); Ching-Hsien Wang (National Central University, Taiwan)
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A Modified Decision Directed Channel Tracking of 802.11p OFDM System

Kao Peng Chou (National Central University, Taiwan)
pp. 673-677

S17: Security

Symmetric Key Distribution for Car-to-Car/Infrastructure Communication Systems

Eriko Ando (Hitachi Ltd., Japan); Yuki Horita (Hitachi Ltd., Japan); Kunihiko Miyazaki (Hitachi Ltd., Japan)
pp. 187-194

Navigation without GPS: Fake Location for Mobile Phone Tracking

Wichian Premchaiswadi (Siam University, Thailand); Walisa Romsaiyud (Siam University, Thailand); Nucharee Premchaiswadi (Dhurakijpundit University, Thailand)
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Securing Smartphone Based ITS

Vasileios Manolopoulos (KTH Royal Institute of Technology, Sweden); Panagiotis (Panos) Papadimitratos (KTH, Sweden); Sha Tao (Royal Institute of Technology (KTH), Sweden); Ana Rusu (Royal Institute of Technology (KTH) Stockholm, Sweden)
pp. 201-206

S23: Greening urban mobility

Link-based Emission Model for Eco Routing

Jianchu Kang (Beihang University, P.R. China); Tao Ma (Beihang University, P.R. China); Fajin Ma (Beihang University, P.R. China); Jian Huang (Beihang University, P.R. China)
pp. 207-212

Effects and Potentials of LEZ in Europe Do they really work?

Dietrich Leihns (Kapsch TrafficCom AG, Austria)
pp. 213-216

Power consumption analysis of constant bit rate data transmission over 3G mobile wireless networks

Le Wang (Aalto University, Finland); Anna Ukhanova (Technical University of Denmark, Denmark); Evgeny Belyaev (St. Petersburg Institute for Informatics and Automation of RAS, Russia)
pp. 217-223

S8: CAM (Context Aware Middleware for Ubiquitous Computing Environments)

Hybrid Interactions in Pervasive Computing Settings

Forough al Sadat Sahafipour (Islamic Azad University of Arak, Iran); Reza Javidan (Shiraz University of Technology, Iran); Hamed Vahdat-Nejad (University of Isfahan, Iran); Mehdi Kadivar (Department of Science, Mathematics Group, Iran)
pp. 596-599

Situational Context for Replica Voting based Data Collection in Hostile Environments

Mohammad Rabby (City University of New York, USA); Kaliappa Ravindran (City University of New York, USA)
pp. 600-605

Towards a Dynamic Adaption of Capacity in Mobile Telephony Networks using Context Information

Sebastian Göndör (Deutsche Telekom Laboratories, Germany); Abdulbaki Uzun (Deutsche Telekom Laboratories, Germany); Axel Küpper (TU Berlin, Germany)
pp. 606-612

S9: SCVN (Seamless Connectivity in Vehicular Networks)

Performance Evaluation of IEEE 802.11p for Vehicular Traffic Congestion Control

Aparajitha Murali (University Visvesvaraya College of Engineering, Bangalore University, India);
Bhanupriya K (University Visvesvaraya College of Engineering, Bangalore University, India);
Smitha Shekar B (University Visvesvaraya College of Engineering, Bangalore University, India);
Narendra Kumar (University Visvesvaraya College of Engineering, India)
pp. 732-737

Comparative Investigation of Single-hop and Multi-hop Broadcast Strategies for Information Dissemination in VANETs

Stefano Busanelli (University of Parma, Italy); Gianluigi Ferrari (University of Parma, Italy); Vito Andrea Giorgio (University of Parma, Italy); Nicola Iotti (Guglielmo srl, Italy)
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Clustered Vehicular Networks: Decentralized Detection "on the Move"

Stefano Busanelli (University of Parma, Italy); Marco Martalò (University of Parma, Italy);
Gianluigi Ferrari (University of Parma, Italy)
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A Fountain Codes-based Data Dissemination Technique in Vehicular Ad-hoc Networks

Veronica Palma (University of ROMA TRE, Italy); Elena Mammi (Fondazione Ugo Bordoni, Italy);
Anna Maria Vegni (University of ROMA TRE, Italy); Alessandro Neri (University of ROMA TRE, Italy)
pp. 750-755

A V2X-based approach for reduction of delay propagation in Vehicular Ad-Hoc Networks

Ahmad Mostafa (University of Cincinnati, USA); Anna Maria Vegni (University of ROMA TRE, Italy); Rekha Singoria (University of Cincinnati, USA); Talmai B Oliveira (University of Cincinnati, USA); Thomas Little (Boston University, USA); Dharma P Agrawal (University of Cincinnati, USA)
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RABAN Workshop I

Markov Models of Statistical Multiplexing of Telephone Dialogue with Packet Switching

Oleg Sheluhin (Moscow Technical University of Communication and Information, Russia);
Aderemi A. Atayero (Covenant University, Nigeria); Monday Ofor Eyinagho (Covenant University, Nigeria)
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Analysis of Robust Collision Resolution Algorithm with Successive Interference Cancellation and Bursty Arrivals

Sergey Andreev (Tampere University of Technology, Finland); Eugeny Pustovalov (Saint-Petersburg State University of Aerospace Instrumentation, Russia); Andrey Turlikov (Saint-Petersburg State University of Aerospace Instrumentation, Russia)
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Lunch

Security Workshop

Short-lived Key Management for Secure Communications in VANETs

Stefano Busanelli (University of Parma, Italy); Gianluigi Ferrari (University of Parma, Italy); Luca Veltri (University of Parma, Italy)
pp. 613-618

Securing Computer Networks Communication By Modifying Computer Network Communication Protocols

Wagdi Youssef (Sourah Council, Egypt)
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Towards Speed Detection Camera System for a RADAR Alternative

Osman Ibrahim (CEO, Egypt); Hazem Mostafa El-Gendy (Assistant Minister, Egypt); Ahmed ElShafee (Ahram Canadian University, Egypt)
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TRxITS Workshop

Determination of antenna specification and positioning for efficient railway communication in tunnels of arbitrary cross section

Jorge Avella Castiblanco (IFSTTAR, LEST & Université Lille Nord de France, France); Divitha Seetharamdoo (IFSTTAR, LEST & Univ Lille Nord de France, France); Marion Berbineau (IFSTTAR, LEST & University Lille Nord de France, France); Michel Ney (TELECOM Bretagne Institute, France); Francois Gallée (Télécom Bretagne, France)
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Feasibility Analysis of UMTS Handover Logs for Traffic State Estimation

Kuen-Rong Lo (Telecommunication Labs of Chunghwa Telecom, Taiwan); Chih-Yi Chiang (Telecommunication Labs of Chunghwa Telecom, Taiwan); Ju-Yin Chuang (Telecommunication Labs of Chunghwa Telecom, Taiwan); Jian-Kai Chen (Telecommunication Labs of Chunghwa Telecom, Taiwan); Chia-Chen Hung (Telecommunication Labs of Chunghwa Telecom, Taiwan); Wei-Hui Chen (Telecommunication Labs of Chunghwa Telecom, Taiwan)
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An Automatic Modulation Classification Technique Using High-Order Statistics for Multipath Fading Channels

Pokuan Shih (National Central University, Taiwan); Dah-Chung Chang (National Central University, Taiwan)
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Tutorial lecture by Prof. Axel Sikora "Synchronization Techniques for Wired and Wireless Networks"

S10: VANET III

Location-aware service discovery on IPv6 GeoNetworking for VANET

Satoru Noguchi (Nara Institute of Science and Technology, Japan); Manabu Tsukada (INRIA Paris - Rocquencourt, France); Thierry Ernst (INRIA, France); Atsuo Inomata (NARA Institute of Science and Technology, Japan); Kazutoshi Fujikawa (Nara Institute of Science and Technology, Japan)
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Joint IP Networking and Radio Architecture for Vehicular Networks

Alexandru Petrescu (Commissariat à l'Énergie Atomique, France)
pp. 230-236

Experimental evaluation of an open source implementation of IPv6 GeoNetworking in VANETs

Thouraya Toukabri (INRIA, France); Manabu Tsukada (INRIA Paris - Rocquencourt, France); Thierry Ernst (INRIA, France); Lamjed Bettaieb (ESPRIT - Tunis, Tunisia)
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S11: Smart Phone Vehicular Communications

On the Feasibility of Utilizing Smartphones for Vehicular Ad Hoc Networking

Wim Vandenberghe (Ghent University – IBBT, Belgium); Ingrid Moerman (Ghent University - IBBT, Belgium); Piet Demeester (Ghent University, Belgium)
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iDANS: A Platform for Disseminating Information on a VANET Consisting of Smartphone Nodes

Dan Sawada (Keio University & Graduate School of Media and Governance, Japan); Masaaki Sato (Keio University, Japan); Keisuke Uehara (KEIO University, Japan); Jun Murai (KEIO University, Japan)
pp. 252-257

Emergency Message Dissemination System for Smartphones During Natural Disasters

Xian Wu (University of Twente, The Netherlands); Maciej Mazurowski (University of Twente, Poland); Zhen Chen (University of Twente, P.R. China); Nirvana Meratnia (University of Twente, The Netherlands)
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S12: Mobility I

3GPP Evolved Packet Core support for distributed mobility anchors

Wolfgang Hahn (Nokia Siemens Networks, Germany)
pp. 264-267

A Layer-2 Approach for Mobility and Transport in the Mobile Backhaul

Nuutti Varis (Aalto University, Finland); Jukka M J Manner (Aalto University, Finland); Johanna Heinonen (NSN, Finland)

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Wireless Backhauling in Intelligent Transportation Systems

Claudio Cicconetti (Intecs S.p.A., Italy); Francesco Galeassi (Intecs S.p.A., Italy); Raffaella Mambrini (Intecs S.p.A., Italy); Michele Rosellini (Intecs S.p.A., Italy); Alessandro Rossi (Intecs S.p.A., Italy)

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Coffee break

RABAN Workshop II

Detection of Abnormal Spikes in Network Traffic Using Multifractal Analysis

Oleg Sheluhin (Moscow Technical University of Communication and Information, Russia); Aderemi A. Atayero (Covenant University, Nigeria); Artem V. Garmashev (Moscow Technical University of Communications and Informatics, Russia)

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Capacity Analysis and Antenna Selection Strategy for Multi-User Distributed Antenna System

Yuyao Zhao (Tsinghua University, P.R. China); Xin Su (Tsinghua University, P.R. China); Jie Zeng (Tsinghua University, P.R. China); Yuan You (Tsinghua University, P.R. China); Xibin Xu (Tsinghua University, P.R. China)

pp. 784-787

User Demand Prediction Algorithm Used in Mobile Device Driver for Cloud Storage

Alexander Mityakov (St. Petersburg Electrotechnical University LETI, Russia); Dmitry L Petrov (St. Petersburg Electrotechnical University, Russia); Maksim Kostenko (St. Petersburg Electrotechnical University LETI, Russia); Denis Butusov (St. Petersburg Electrotechnical University LETI, Russia)

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Efficient Baseband Implementation on an SDR Platform

Wen Xu (Intel & Intel Mobile Communications, Germany); Mathias Richter (Universität der Bundeswehr München, Germany); Mirko Sauermann (Intel Mobile Communications, Germany); Fatih Capar (Intel Mobile Communications, Germany); Cyprian Grassmann (Infineon, Germany)

pp. 794-799

Design and Implementation of SRRC IP Generator

Jue Hsuan Hsiao (Oriental Institute of Technology, Taiwan); Yi Hua Chen (Oriental Institute of Technology, Taiwan); Chih Hung Tseng (Oriental Institute of Technology, Taiwan); Pang Fu Liu (Oriental Institute of Technology, Taiwan); Kun Feng Lin (Oriental Institute of Technology, Taiwan)

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Security Workshop

An ATL Transformation from Natural Language Requirements Models to Business Models of a MDA Project

Narayan Debnath (Winona State University, USA); Maria Leonardi (Universidad Nacional del Centro de la Provincia de Buenos Aires, Argentina); Maria Mauco (Universidad Nacional del Centro de la Pcia. de Buenos Aires, Argentina); Laura Felice (Universidad Nacional del Centro de la Pcia. de Buenos Aires, Argentina); German Montejano (Universidad Nacional de San Luis, Argentina); Daniel Riesco (Universidad Nacional de San Luis, Argentina)

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A Method to evaluate QoS of Web Services required by a workflow

Narayan Debnath (Winona State University, USA); Paola Martellotto (Universidad Nacional de Rio Cuarto, Argentina); Daniel Riesco (Universidad Nacional de San Luis, Argentina); German Montejano (Universidad Nacional de San Luis, Argentina)
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Implementation of NTRU PKCS using Array for polynomials upto degree 147

Debidas Ghosh (National Institute of Technology, Durgapur, West Bengal, India)
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Applying Open Networks Communication Authentication

Wagdi Youssef (Sourah Council, Egypt); Hazem Mostafa El-Gendy (Assistant Minister, Egypt)
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TRxITS workshop

Higher-Order Statistics Based Sequential Spectrum Sensing for Cognitive Radio

Hsing-yi Hsieh (National Central University, Taiwan); Han-Kui Chang (National Central University, Taiwan); Meng-lin Ku (National Central University, Taiwan)
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MUSIC-Based Multiple CFOs Estimation Methods for CA-OFDM Systems

Chin-Yi Chang (National Central University, Taiwan); Yu-Ting Sun (National Central University, Taiwan); Meng-lin Ku (National Central University, Taiwan)
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Trust Levels in Peer-to-Peer (P2P) Vehicular Network

Irshad Sumra (Universiti Teknologi Petronas, Malaysia); Halabi Hasbullah (Universiti Teknologi PETRONAS, Malaysia); Jamalul-lail Ab Manan (MIMOS Berhad, Malaysia); Mohsin Iftikhar (King Saud University, Saudi Arabia); Iftikhar Ahmad (Universiti Teknologi PETRONAS, Malaysia); Mohammed Yeyyah Aalsalem (University of Sydney, Australia)
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Development of a simulation plateform for ACC radar application

François Gallée (Télécom Bretagne, France); Dominique Leroux (Telecom Bretagne, France); Alain Peden (Telecom Bretagne, France); Michel Ney (TELECOM Bretagne Institute, France); Dominique Gruyer (LIVIC-IFSTTAR, France)
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S13: 2nd workshop on GNSS applications for ITS

Non-Line-Of-Sight GNSS signal detection using an on-board 3D model of buildings

François Peyret (IFSTTAR: French Institute of Sciences and Technology for Transport, Development and Networks, France); David Bétaille (IFSTTAR, France); Florian Mougel (IFSTTAR, France)
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GPS/GLONASS Receiver in Land Vehicle: Expectations and Reality

Andrey Botchkovski (Mstar Semiconductor, Russia); Nikolay Mikhaylov (Mstar Semiconductor & St. Petersburg State University of Aerospace Instrumentation, Russia); Sergey Pospelov (Mstar Semiconductor, Russia)
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Performance Evaluation of GNSS Aided Predictive Multihommed NEMO Configurations

József Kovács (Computer and Automation Research Institute, Hungarian Academy of Sciences, Hungary); László Bokor (Budapest University of Technology and Economics, Hungary); Gábor Jeney (Budapest University of Technology and Economics & Network Security Audit Ltd., Hungary)
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Combination of RSS localization and ToF ranging for increasing positioning accuracy indoors

Aleksandr Galov (Petrozavodsk State University & RTL-Service Ltd, Russia); Alexei P. Moschevikin (Petrozavodsk State University, Russia); Roman Voronov (Petrozavodsk State University, Russia)
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A Theoretical Analysis of the Extended Kalman Filter for Data Fusion in Vehicular Positioning

Rafael Toledo-Moreo (University of Murcia, Spain); Dominique Gruyer (LIVIC-IFSTTAR, France); Alain Lambert (Université Paris-Sud XI, France)
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An Effect of Applying Information Filtering to a Positioning System Using Address Information on Web and Spot Information in Cityscape

Tomotaka Nagao (Kanto Gakuin University, Japan); Arata Yuge (Kanto Gakuin University, Japan)
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Hybrid Vehicle Positioning and Tracking Using Mobile Phones

Sha Tao (Royal Institute of Technology (KTH), Sweden); Vasileios Manolopoulos (KTH Royal Institute of Technology, Sweden); Saul Rodriguez (Royal Institute of Technology KTH, Sweden); Mohammed Ismail (KTH Royal Institute of Technology, Sweden); Ana Rusu (Royal Institute of Technology (KTH) Stockholm, Sweden)
pp. 315-320

Proposal of Position Estimation Algorithm using a Satellite and Shared Data of Receivers

Hironobu Onishi (Shizuoka University, Japan); Hiroyuki Hatano (Shizuoka University, Japan); Yoshihiko Kuwahara (Shizuoka University, Japan)
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S14: VRUP Workshop (Vunerable Road Users Protection)

From user wishes to system architecture Safety for children going to and from school by bus

Anna Anund (Swedish National Road and Transport Research Institute, Sweden); Tania Dukic (Swedish National Road and Transport Research Institute, Sweden)
pp. 327-331

Protocol and System Design of a Cooperative Pedestrian Safety System

Axel Sikora (University of Applied Sciences Offenburg, Germany); Dirk Lill (Steinbeis Innovation Center Embedded Design and Networking, Germany); Manuel Schappacher (Steinbeis Innovation Center Embedded Design and Networking, Germany); Alexander Gutjahr (Steinbeis Innovation Center Embedded Design and Networking, Germany)
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Enhancing the reproduction of road signs in automotive HMs to protect children

Melanie Ganzhorn (University of Stuttgart & IAT, Germany); Frederik Diederichs (University of Stuttgart IAT & Fraunhofer IAO, Germany); Harald Widlroither (University of Stuttgart IAT, Germany)
pp. 338-344

Experimental Evaluation of ITST based School Bus Stop Notifications for Car Drivers

Frederik Diederichs (University of Stuttgart IAT & Fraunhofer IAO, Germany); Betina Weber (University of Stuttgart IAT, Germany); Melanie Ganzhorn (University of Stuttgart & IAT, Germany)
pp. 345-350

Cross-Network Information Dissemination in VANETs

Gianluigi Ferrari (University of Parma, Italy); Stefano Busanelli (University of Parma, Italy); Nicola Iotti (Guglielmo srl, Italy); Yossi Kaplan (Cellint Traffic Solutions Ltd, Israel)
pp. 351-356

Experiences from an application for safe transport to and from school A step toward SAFEWAY2SCHOOL

Asa Viklund (Swedish Transport Administration, Sweden); Katarina Appeltoft (Swedish Transport Administration, Sweden)
pp. 357-360

S15: VANET IV

Intelligent Disaster Management System based on Cloud-enabled Vehicular Networks

Zubaida Alazawi (Swansea University, United Kingdom); Mohammad B. Abdiljabar (Al-Mustansiriya University, Iraq); Saleh Altowaijri (Swansea University, United Kingdom); Rashid Mehmood (Swansea University, United Kingdom)
pp. 361-368

Efficient and Unique Identifier for V2X Events Aggregation in the Local Dynamic Map

Hamid Menouar (QU Wireless Innovations Center, Qatar); Fethi Filali (QU Wireless Innovations Center, Qatar); Adnan Abu-Dayya (QUWIC, Qatar)
pp. 369-374

The Weather Hazard Warning in simTD: A Design for Road Weather Related Warnings in a Large Scale Car-to-X Field Operational Test

Attila Jaeger (Technische Universität Darmstadt, Germany); Sorin A. Huss (Technische Universität Darmstadt, Germany)
pp. 375-380

Impact of Packet Loss on CACC String Stability Performance

Chenxi Lei (University of Twente, The Netherlands); Emiel Martijn van Eenennaam (University of Twente, The Netherlands); Wouter Klein Wolterink (University of Twente, The Netherlands); Jeroen Ploeg (Netherlands Organisation for Applied Scientific Research TNO, The Netherlands); Georgios Karagiannis (University of Twente, The Netherlands); Geert Heijenk (University of Twente, The Netherlands)
pp. 381-386

Efficient Map Based Location Service for VANETs

Ashok D M (Manipal Institute of Technology, Manipal University, India); Manohara Pai (Manipal Institute of Technology, Manipal University, India); Joseph Mouzna (Esigelec-Irseem, France)
pp. 387-392

RFTraffic: Passive Traffic Awareness Based on Emitted RF Noise from the Vehicles

Yong Ding (Karlsruhe Institute of Technology, Germany); Behnam Banitalebi (Karlsruhe Institute of Technology, Germany); Takashi Miyaki (Karlsruhe Institute of Technology, Germany); Michael Beigl (KIT & TecO, Germany)
pp. 393-398

An Efficient Destination-Based Data Management Policy for Vehicular Networks

Mildred Caballeros Morales (Kyung He University, Korea); Choong Seon Hong (Kyung Hee University, Korea)
pp. 399-404

QoS for highly dynamic vehicular ad hoc network optimality

Prabhakar Rontala Subramaniam (University of KwaZulu-Natal, South Africa); Arunkumar Thangavelu (Vellore Institute of Technology, India); Chitra Venugopal (University of Kwazulu Natal, South Africa)
pp. 405-411

Bus tour

Thursday, August 25

Keynote by Dr. Hendrik Berndt

TRxITS Workshop and Discussions

Improved Frequency Offset Estimation Technique in IEEE 802.11p Environments

Wen-Jeng Lin (National Chi Nan University, Taiwan); Jung-Shan Lin (National Chi Nan University, Taiwan); Yu-Ting Sun (National Central University, Taiwan)
pp. 721-726

Efficient Data Transmission Scheme for MTC Communications in LTE System

Shiann-Tsong Sheu (National Central University, Taiwan); Chun-Hsiang Chiu (National Central University, Taiwan); Shao-Jung Lu (National Central University, Taiwan); Hsien-Hao Lai (National Central University, Taiwan)
pp. 727-731

Tutorial lecture by Michele Fiorini, Flavio Testi "The maritime navigation from the Titanic to nowadays e-Navigation"

Keynote by Dr. Fan Bai (presented by Dr. Alexey Ushakov) "Vehicular Ad hoc Network and Its Challenges"

Break

Keynote by Mr. Jim Buczkowski "Making Cars Talk: Enabling the Connected Car"

Coffee Break

Panel Discussion: ERA-Glonass: Technological Framework and Applications

S26: Image processing

A novel adaptive support window based stereo matching algorithm for 3D reconstruction from 2D images

Iveel Jargalsaikhan (National Institute of Technology, Karnataka, India); Sumam David (National Institute of Technology Karnataka, India)
pp. 412-418

Development of High Accuracy Congestion Prediction Algorithm Using Series of Camera Detectors

Kittipong Hi-ri-o-tappa (Chulalongkorn University & National Science and Technology Development Agency, Thailand); Wasan Pattara-Atikom (National Electronic and Computer Technology Center (NECTEC), Thailand); Suttipong Thajchayapong (Imperial College London, United Kingdom); Sorawit Narupiti (Chulalongkorn University, Thailand)
pp. 419-425

An Infrared Thermal Image Acquisition System for Intra-Vehicle Applications

Hanna Farhat (IETR-INSA Rennes, France); Eric Bazin (IETR-INSA Rennes, France); Sylvain Haese (IETR-INSA Rennes, France); Ghais El Zein (IETR-INSA Rennes, France)
pp. 426-430

Robust Hand Gesture Recognition System using Motion Templates

Shrikant Kulkarni (Broadcom Communication Technologies Pvt. Ltd., India); Manoj H (National Institute of Technology Karnataka Surathkal, India); Sumam David (National Institute of Technology Karnataka, India); Venugopala Madumbu (Texas Instruments, India); Y Senthil Kumar (Texas Instruments, India)
pp. 431-435

Lunch

Tutorial by Jérôme Härri, Marco Fiore "Vehicular Networking: History, State of the Art and Interdisciplinary Aspects"

S16: VANETs V

Performance Implications of Fragmentation Mechanisms on Vehicular Delay-Tolerant Networks

João Dias (Instituto de Telecomunicações, University of Beira Interior, Portugal); João Isento (Instituto de Telecomunicações, University of Beira Interior, Portugal); Joel J. P. C. Rodrigues (Instituto de Telecomunicações, University of Beira Interior, Portugal); Paulo Pereira (INESC-ID & IST-TU Lisbon, Portugal); Jaime Lloret (Universidad Politécnica de Valencia, Spain)
pp. 436-441

WAVE System Architecture Design in Urban Area

Tsutomu Tsutobi (Hitachi Ltd., Japan)
pp. 442-446

Data replication in distributed database systems in VANET

Anton Lieskovsky (Univerzity of Žilina, Slovakia); Ján Janech (University of Žilina, Slovakia); Tomas Baca (University of Žilina, Slovakia)
pp. 447-452

S18: PHY II

MIMO Systems for Turbo Coded Cooperation over Orthogonal and Non-Orthogonal Channels

Haifa Farès (ENST Bretagne, France); Sidi Ould Mohamed (SUPCOM, Tunisia); Charlotte Langlais (Télécom Bretagne, France); Alexandre Graell i Amat (Chalmers University of Technology, Sweden); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France)
pp. 453-457

Blind Detection of the Number of Transmitting Antennas for Spatially-Correlated MIMO Systems

Kais Hassan (University Lille Nord de France, France); Crépin Nsiala (Institut National de Recherche sur le Transport et leur Sécurité, France); Roland Gautier (University of Brest, France); Emanuel Radoi (University of Brest & Lab-STICC UMR CNRS 3192, France); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France); Iyad Dayoub (University Lille Nord de France, France)
pp. 458-462

Iterative Joint Channel Estimation and Data Detection for MIMO-CDMA Systems over Correlated Fading Channels

Ayman Assra (IFSTTAR, Finland); Walaa Hamouda (Concordia University, Canada); Iyad Dayoub (University Lille Nord de France, France); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France)
pp. 463-467

S24: Miscellaneous II

Multipath Rate Allocation Algorithm for Overlay Networks with Feedback From Overlay Nodes

Svetlana Boudko (Norsk Regnesentral, Norway); Wolfgang Leister (Norsk Regnesentral, Norway); Carsten Griwodz (Simula Research Laboratory, Norway); Pål Halvorsen (Simula Research Laboratory & Department of Informatics, University of Oslo, Norway)
pp. 468-473

Using Cooperation among Peers and Interest Mixing to Protect Privacy in Targeted Mobile Advertisement

Ahmed Fawaz (American University of Beirut, Lebanon); Ali Hojaij (American University of Beirut, Lebanon); Hadi Kobeissi (American University of Beirut, Lebanon); Hassan A. Artail (American University of Beirut, Lebanon)
pp. 474-479

S27: Electric vehicles

Mastering cooperation: electric vehicle and smart grid

Mikhail Simonov (ISMB & Politecnico di Milano, Italy)
pp. 480-485

Selected findings from a German lighthouse project on electric mobility

Jan Henrik Dornberg (FIR at RWTH Aachen University, Germany); Theo Lutz (FIR e. V. at RWTH Aachen, Germany)
pp. 486-491

A Charge Algorithm Proposal for Wirelessly Charged Networks

Andres Gómez (Universidad de Los Andes, Colombia); Yezid E. Donoso (Universidad de los Andes, Colombia)
pp. 492-496

Tutorial by Jérôme Härrí, Marco Fiore "Vehicular Networking: History, State of the Art and Interdisciplinary Aspects"

S20: Road Traffic

An Evaluation of Travel Time on Urban Road Network

Tongyu Zhu (Beihang university, P.R. China); Congcong Li (Beihang University, P.R. China); Sanli Ma (Beihang University, P.R. China); Dongdong Wu (Beihang University, P.R. China); Wang Cennavi Technologies Co. Ltd, P.R. China
pp. 497-502

Driving Route Based Visual Traffic Information System

Lan Li (Hitachi (CN) Research & Development Corporation, P.R. China); Bo Liu (Hitachi (China) Research & Development Corporation, P.R. China); Yoshinori Nakagawa (Hitachi Government & Public Corporation System Engineering, Ltd., Japan)
pp. 503-508

Research on Experienced Route for Driving Plan Services

Yuhe Zhang (Hitachi (CN) Research & Development Corporation, P.R. China); Man Li (Hitachi (CN) R&D Corporation, P.R. China); Wenjia Wang (Hitachi (China) R&D Corporation, P.R. China)

pp. 509-514

A Novel Model to Evaluate Urban Overall Traffic Condition

Weifeng Lv (Beijing University of Aeronautics and Astronautics, P.R. China); Xinxin Jiang (Beihang University, P.R. China); Congcong Li (Beihang University, P.R. China); Tongyu Zhu (Beihang university, P.R. China)

pp. 515-520

Reducing the Probability of Violating Red Light

Iman Abbaszadeh Fallah (Universiti Teknologi Malaysia, Malaysia); Hamed Esmaeeli (Universiti Teknologi Malaysia & UTM, Malaysia)

pp. 521-526

S21: ITS II

A Transport based Clearing System for Dynamic Carpooling Business Services

Gérald Arnould (Public Research Centre Henri Tudor, Luxembourg); Djamel Khadraoui (CRP Henri Tudor, Luxembourg); Marcelo Armendáriz (University of Vigo, Spain); Juan C. Burguillo (University of Vigo & University of Vigo, Spain); Ana Peleteiro (University of Vigo, Spain)

pp. 527-533

The maritime e-Navigation and the Titanic: are there any links?

Michele Fiorini (Selex-Sistemi Integrati & IET Italy, Italy)

pp. 534-539

A Novel Vehicular SMS System (VSS) Approach for Intelligent Transport System (ITS)

Irshad Sumra (Universiti Technologi Petronas, Malaysia); Halabi Hasbullah (Universiti Teknologi PETRONAS, Malaysia); Jamalul-lail Ab Manan (MIMOS Berhad, Malaysia)

pp. 540-546

A Systemic and Cooperative Approach towards an Integrated Infomobility System at Regional Scale

Dino Giulì (CNIT - University of Firenze, Italy); Federica Paganelli (National Inter-University Consortium for Telecommunications & Research Unit of Firenze, c/o Dept. of Electronics and Telecommunications, Italy); Stefano Cuomo (National Inter-University Consortium for Telecommunications, Italy); Paolo Cianchi (Negentis, Italy)

pp. 547-553

S22: PHY III

A High Performance Baseband Transceiver for In-Vehicle Power Line Communications

Chin-Lin Lo (National Tsing Hua University, Taiwan); Hsi-Pin Ma (National Tsing Hua University, Taiwan)

pp. 554-558

Performance analysis and complexity study of LDPC and Turbo Coding schemes for Inter Vehicle Communications

George C. Kiokes (Institute of Communication and Computer Systems & National Technical University of Athens, Greece); George Economakos (National Technical University of Athens, Greece); Angelos Amditis (Institute of Communication and Computer SYstems, Greece); Nikolaos Uzunoglu (National Technical University Athens, Greece)

pp. 559-564

Joint CFO and channel acquisition and tracking based on parametric channel modeling for OFDM systems in the presence of high mobility

Eric Simon (University of Lille, France); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France); Martine Liénard (University of Lille, France)
pp. 565-570

S7: Mobility II

Evaluating New Prototyping Framework based on Combining Embedded Sensors Data and ns2 Simulations

Nadeen Salameh (INSA of ROUEN, France)
pp. 571-577

Simulation of automotive cooperative system based on Software Defined Radio (SDR)

Mohamed Kassab (IFSTTAR, LEOST & Univ Lille Nord de France, France); Christophe Gransart (INRETS, France); Martine Wahl (IFSTTAR, LEOST & Univ Lille Nord de France, France); Marion Berbineau (IFSTTAR, LEOST & University Lille Nord de France, France)
pp. 578-583

An Auction Approach to Group Handover with Mobility Prediction in Heterogeneous Vehicular Networks

Guoxia Zhang (522 W 123RD ST, APT 2E, USA); Fuqiang Liu (Tongji University, P.R. China)
pp. 584-589

Handover in Vehicular Communication Networks

Chi-Sheng Lin (National Central University, Taiwan); Jia-Chin Lin (National Central University, Taiwan)
pp. 590-595

Dinner. Conference closing.