2016 8th International Congress on Ultra Modern Telecommunications and Control Systems and Workshops (ICUMT 2016)

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Tuesday, October 18, 13:00 - 14:30

CS1: Control Systems Design

Room 02.1

Hybrid Parallel Neuro-controller for Multirotor Unmanned Aerial Vehicle
Alexey Bobtsov, Alexei Guirik, Mikhail Budko and Marina Budko (ITMO University, Russia)

Developing a movement algorithm for a wheeled robot moving over a rough terrain
Veronika Mazulina (University of Information Technologies, Mechanics and Optics, Russia); Yury Litvinov and Alexandr Bushuev (Saint Petersburg National Research University of Information Technologies, Mechanics and Optics, Russia)

Hybrid Sliding Mode Fuzzy Logic-Based PI Controller Design and Implementation of Shape Memory Alloy Actuator
Yasser Mahmoud Alsayed Hassan and Ahmed Abouelsoud (Egypt-Japan University of Science and Technology, Egypt); Ahmed Rashad Fathelbab (Egypt-Japan University for Science and Technology, Egypt)

A Lyapunov Equation Based Mapping Approach to Achieve Controller Integrity
Khaled Alaa (RWTH Aachen University, Germany); Ilhan Mutlu (RWTH Aachen University & Mr., Germany); Frank Schrödel (IAV GmbH, Germany); Mehmet Turan Soylemez (Technical University of Istanbul, Turkey, Turkey); Dirk Abel (RWTH Aachen University, Germany)

Robust suboptimal output control for a Twin Rotor MIMO System
Sergey Vrazhevsky (ITMO University, Russia); Julia Chugina (ITMO University & Institute of Problems of Mechanical Engineering Russian Academy of Sciences, Russia); Igor Furtat and Artem Kremlev (ITMO University, Russia)

Neural Network Approach based on Convex Incremental Learning Machine for Prediction of Diffuse Solar Radiation
Elizabeta D Lazarevska (University "Ss. Cyril and Methodius" Skopje & Faculty of Electrical Engineering and Information Technologies, Macedonia, the former Yugoslav Republic of)

NT01: Modern Network Technologies

Room 02.2

Vehicular Safety Application Identifier Algorithm for LTE VANET Server
Shuja Ansari, Tuleen Boutaleb and Carlos Gamio (Glasgow Caledonian University, United Kingdom); Sinan Sinanovic (GCU, United Kingdom); Ioannis Krikidis (University of Cyprus, Cyprus); Marvin Sánchez Garache (National University of Engineering of Nicaragua (UNI), Nicaragua)

An SDR Platform Using Direction Finding and Statistical Analysis for the Detection of Interferers
Wissam Abdessamad (AUB, Lebanon); Youssef Nasser (American University of Beirut, Lebanon); Samah Chazbeck (Lebanese University, Lebanon); Ghassan Fakher and Hassan A. Artail (American University of Beirut, Lebanon); Oussama Bazzi (Lebanese University, Lebanon)

TC01: Internet of Things

Room 01.1

Tuesday, October 18, 15:00 - 16:30

RA01: RABAN workshop

Room 02.2

Improving Reliability of Replicated Message Delivery in Cellular Machine-Type Communications
Olga Galinina (Tampere University of Technology, Finland); Andrey Turlikov (Saint-Petersburg State University of Aerospace Instrumentation, Russia); Sergey Andreev and Yevgeni Koucheryavy (Tampere University of Technology, Finland)

Analysis of Energy Harvesting Efficiency for Power Supply of WBAN Nodes in Heterogeneous Scenarios
Evgeny Bakin, Ilya Ivanov and Maria Shelest (State University of Aerospace Instrumentation, Russia); Andrey Turlikov (Saint-Petersburg State University of Aerospace Instrumentation, Russia)

Modeling the Utilization of a Multi-Tenant Band in 3GPP LTE System with Licensed Shared Access
Irina A. Gudkova (RUDN University & Institute of Informatics Problems, Federal Research Center Computer Science and Control of Russian Academy of Sciences, Russia); Ekaterina V. Markova (Peoples' Friendship University of Russia, Russia); Pavel Masek (Brno University of Technology, Czech Republic); Sergey Andreev (Tampere University of Technology, Finland); Jiri Hosek (Brno University of Technology, Czech Republic); Natalia Yarkina (Peoples' Friendship University of Russia, Russia); Konstantin Samouylov (Peoples' Friendship University of Russia, Russia); Yevgeni Koucheryavy (Tampere University of Technology, Finland)

D2D Communications for Mobile Devices: Technology Overview and Prototype Implementation
Mathieu Devos and Aleksandr Ometov (Tampere University of Technology, Finland); Niko Mäkitalo (Tampere University of Technology & TUT, Finland); Timo Aaltonen, Sergey Andreev and Yevgeni Koucheryavy (Tampere University of Technology, Finland)

Distributed GNSS-Based Time Synchronization and Applications
Dmitry Petrov (Magister Solutions Ltd., Finland); Sergei Melnik (Central Scientific Research Institute of Communication & Moscow Technical University of Communications and Informatics, Russia); Timo Hämäläinen (University of Jyväskylä, Finland)

On The Performance Evaluation of MIMO-SCMA Systems
Wissam Abdessamad (AUB, Lebanon); Youssef Nasser and Karim Youssef Kabalan (American University of Beirut, Lebanon); Oussama Bazzi (Lebanese University, Lebanon)

TC02: Modern Cellular Systems

Room 01.1

Sleep Mode Performance Gains In 5G Femtocell Clusters
Christos J Bouras (University of Patras CTI&P-Diophantus & University of Patras, Greece); Georgios Diles (Computer Engineering and Informatics Dept., University of Patras, Greece)

TH01: THZCOM workshop

Room 02.1

Wednesday, October 19, 09:00 - 09:10

FOAN 2016: Opening session

Room 02.2

Wednesday, October 19, 09:10 - 10:30

FOAN 2016: Telecom session 1

Room 02.2

Wednesday, October 19, 10:00 - 11:00

KS03: Keynote 3: Challenges in Robotics to face the new era

Lucia Pallottino - Associate Professor at the Centro „E. Piaggio" and the Dipartimento di Ingegneria dell'Informazione, University of Pisa

Room: Grand Auditorium

Wednesday, October 19, 11:00 - 12:00

Keynote 4: My Forty-year Adventure in the Wonderful World of Fiber Optics!

Henri Hodara - co-founder of Tetra Tech, technologist, business executive and entrepreneuer

Room: Grand Auditorium

Wednesday, October 19, 12:00 - 13:00

Lunch

Room: Hall 02

Wednesday, October 19, 13:00 - 14:30

CS02: Real-world Applications of Control Systems

Room 02.1

TP01: Candidate Multicarrier Waveforms for Future 5G Communication Systems - Tutorial part 1

Room 01.1

Wednesday, October 19, 13:10 - 13:45

FOAN 2016: INVITED TALK - INDUSTRY EXPERT

Room 02.2

Wednesday, October 19, 13:45 - 14:30

FOAN 2016: Telecom session 2

Room 02.2

Wednesday, October 19, 14:30 - 15:00

Coffee break

Wednesday, October 19, 15:00 - 16:30

FOAN 2016: PON Session

IT01: Cloud Services and Network Virtualization

Explore Maximal Frequent Itemsets for Big Data Pre-processing based on Small Sample in Cloud Computing 235
Gaochao Xu, Yan Ding and Chunyi Wu (Jilin University, P.R. China); Yunan Zhai (Jilin Communications Polytechnic, P.R. China); Jia Zhao (High-Assurance Software Laboratory, INESC TEC & University of Minho & ChangChun University of Technology, Portugal)

Improved Perfect Secrecy of Distributed Storage Systems using Interference Alignment 240
Natasa Paunkoska (University of Information and Science Technology St. Paul the Apostle, Macedonia, the former Yugoslav Republic of); Venceslav Kafedziski (Cyril and Methodius University, Macedonia, the former Yugoslav Republic of); Ninoslav Marina (Princeton University, USA)

Evaluating the Influence of Geographical Location between Cellular End-users and Data Center on Latency in E-UTRAN Network 246
Dalibor Uhlir, Martin Stusek, Pavel Masek, Jiri Hosek and Petr Cika (Brno University of Technology, Czech Republic)

On Telecommunication Architectures: from Intelligent Network to Network Functions Virtualization 251
Manfred Schneps-Schneppe (Ventspils University College, Latvia); Dmitry Namiot (Moscow State University, Russia)

Improving DSS Efficiency with Shortened MSR Codes 257
Ninoslav Marina (Princeton University, USA); Natasa Paunkoska (University of Information and Science Technology St. Paul the Apostle, Macedonia, the former Yugoslav Republic of); Weiler A. Finamore (UFJF - Federal University of Juiz de Fora, Brazil); Jovan Karamachoski (UIST, Macedonia, the former Yugoslav Republic of); Magdalena Punceva (UGD, Macedonia, the former Yugoslav Republic of)

A Cloud-based heterogeneous wireless platform for monitoring and management of freight trains 263
Sandro Chiocchio and Arianna Persia (Radiolabs, Italy); Fortunato Santucci (University of l'Aquila, Italy); Valerio Di Claudio, Domenico Di Grande, Pasquale Giugliano and Giovanni Guidotti (Finmeccanica, Italy)

TP02: Candidate Multicarrier Waveforms for Future 5G Communication Systems - Tutorial part 2

Wednesday, October 19, 16:30 - 18:15

FOAN 2016: Fiber AND Free Space Optics

Wednesday, October 19, 18:15 - 18:25

FOAN 2016: Closing session

Wednesday, October 19, 20:00 - 22:00

Gala dinner - Holiday Inn Lisboa, Av. de António José de Almeida 28, Lisboa

Thursday, October 20

Thursday, October 20, 09:00 - 10:30

AP01: APTP + MS workshop

CS03: Analytical and Experimental Evaluation of Control Systems

Room 02.1

TC03: Security and Reliability Issues in Communications

Room 01.1

Thursday, October 20, 10:30 - 11:00

Coffee break

Room: Hall 02

Thursday, October 20, 11:00 - 12:30

CS04: Industrial Control Systems

Room 02.1

TC04: Network and Data Coding

Room 01.1

TC05: Radio Access Technologies

Room 02.2

***Outage Analysis of Dynamic Selective Decode-and-Forward in Slow Fading
Wireless Relay Networks***

> Abdulaziz Mohamad (Supélec & Orange Labs, France); Raphael Visoz (Orange Labs,
> France); Antoine O. Berthet (CentraleSupélec, France)

***Prediction and Separation of Synchronous-networking Frequency Hopping
Signals Based on RBF Neural Network***

> Ziwei Lei, Linhua Zheng, Hong Ding, Hui Xiong and Hua Li (National University of
> Defense Technology, P.R. China)

***Wireless Crowdsourced Performance Monitoring and Verification WiFi
Performance Measurement Using End-User Mobile Device Feedback***

> Vasileios Kokkinos (CTI Diophantus and University of Patras, Greece); Kostas
> Stamos, Mr (University of Patras and CTI & Technological Educational Institute of
> Patras, Greece); Kurt Baumann (SWITCH - National Research and Education
> Network (NREN) of Switzerland, Switzerland); James Healy (Dublin City University,
> Ireland); Anna Wilson (HEAnet, Ireland); Nikolaos Kanakis (University of Patras,
> Greece)

***Outage Performance of Spatial Modulation with Transmit Antenna Selection over
Nakagami-m Fading Channels with Arbitrary m***

> Ferhat Yarkin and İbrahim Altunbaş (Istanbul Technical University, Turkey)

***Adaptive filtration of random signals in active antenna array with nonlinear
transmit-receive modules***

> Yuri Parshin and Sergey Kolesnikov (Ryazan State Radio Engineering University,
> Russia)

***Influence of input power backoff of nonlinear power amplifier on BER
performance of optimal SEFDM signals***

> Sergey V. Zavjalov, Dmitrii Fadeev and Sergey V. Volvenko (Peter the Great St.
> Petersburg Polytechnic University, Russia)

Thursday, October 20, 12:30 - 13:30

Lunch

Room: Hall 02

Thursday, October 20, 14:00 - 17:00

Guided bus city tour - meeting point in front of the Hotel Holiday Inn Lisbon