

Tentative program of NEW2AN/ruSMART 2015

WEDNESDAY, August 26, 2015

09:00 - 09:30 Registration

09:30 - 11:30 Session 1 (keynote + 3 papers)

Opening Session: IoT infrastructure

09:30 - 09:45 Opening

09:45 - 10:30 Keynote talk: Securing the Internet of Things: Opportunities and challenges with scaling IoT solutions, Rob van den Dam, Global Telecommunications Industry Leader, IBM Institute for Business Value, Netherlands.

10:30 - 11:30 Session 1

1570142957 The Monitoring of Information Security of Remote Devices of Wireless Networks, Viktoria Korzhuk, Ilya Lebedev

1570158781 Synthesis of the wireless sensor network structure in the presence of physical attacks, Vladimir Mochalov

1570158653 Parent-Aware Routing for IoT Networks, Necip Gozuacik, Sema Oktug

11:30 - 12:00 Coffee break

12:00 - 13:20 Session 2 (4 papers) IoT Platforms

1570141513 A Multi-broker Platform for the Internet of Things, Alfredo D'Elia, Fabio Viola, Luca Roffia, Tullio Salmon Cinotti

1570143551 Cloud IoT platforms: a solid foundation for the future Web or a temporary workaround?, Sergey Efremov, Nikolay Pilipenko, Leonid Voskov, Mikhail Komarov

1570158481 The Smart-M3 Platform: Experience of Smart Spaces Application Development for Internet of Things, Dmitry G. Korzun, Alexey Kashevnik, Sergey I. Balandin, Alexander Smirnov

1570158495 Multi-Level Robots Self-Organization in Smart Space: Approach and Case Study, Alexander Smirnov, Alexey Kashevnik, Sergey Mikhailov, Mikhail Mironov, Olesya Baraniuc

13:20 - 14:40 Lunch

14:40 - 16:00 Session 3 (4 papers) Smart Spaces and IoT Use cases

1570141345 High Capacity Trucks serving as Mobile Depots for Waste Collection in IoT-enabled Smart Cities, Theodoros Vasileios Anagnostopoulos, Arkady Zaslavsky, Stefanos Istvan Georgiou, Sergey Khoruzhnikov

1570149045 Big Data Governance for Smart Logistics: a Value-Added Perspective, Jae Un Jung, Hyun Soo Kim

1570158365 Waste management as an IoT enabled service in Smart Cities, Alexey Medvedev, Petr Fedchenkov, Arkady Zaslavsky, Theodoros Vasileios Anagnostopoulos, Sergey Khoruzhnikov

1570153987 Service Intelligence Support for Medical Sensor Networks in Personalized Mobile Health Systems, Dmitry G. Korzun, Ilya Nikolaevskiy, Andrei Gurtov

16:00 - 16:30 Coffee break

16:30 - 17:50 Session 4 (4 papers) Smart Services and Solutions

1570133351 Synthesis of Multi-Service Infocommunication Systems with Multimodal Interfaces, Oleg Basov, Dmitry Struev, Andrey Ronzhin

1570155115 Data mining algorithms parallelizing in functional programming language for execution in cluster, Ivan Kholod, Aleksey Malov, Sergey Rodionov

1570158041 Ontology-Based Voice Annotation of Data Streams in Vehicles, Inna Sosunova, Arkady Zaslavsky, Theodoros Vasileios Anagnostopoulos, Alexey Medvedev, Sergey Khoruzhnikov, Vladimir Grudin

1570137763 Method of Defining Multimodal Information Falsity for Smart Telecommunication Systems, Oleg Basov, Andrey Ronzhin, Victor Budkov, Igor Saitov

17:50 - 18:00 Closing of the first day and details of the social event

18:00 – 21:30 Social event on the boat

THURSDAY, August 27, 2015

09.00 – 09.30 Opening and registration

09.30 – 10.30 Keynote presentation

10:30 – 11:00 Coffee Break

11.00 – 13.00 Session IA: Streaming, video, and TCP applications

1570158593	Addressing the Influence of Hidden State on Wireless Network Optimizations using Performance Maps	Kim Højgaard-Hansen; Tatiana Madsen; Hans-Peter Schwefel
1570147523	Discrete Model of Congestion Avoidance Algorithm with Round Dependent Loss Rate	Olga Bogoiavlenskaia
1570158271	Chunked-Swarm: Divide and Conquer for Real-time Bounds in Video Streaming	Christopher Probst; Andreas Disterhöft; Kalman Graffi
1570158551	Adaptive mobile P2P streaming System for Wireless LAN	Geun-Hyung Kim
1570150999	Application for Selective Streaming of Video Components	Humera Siddiqua and Hamid Shahnasser
1570148613	Modeling and Monitoring of RTP Link on the Receiver Side	Andrey V Borisov; Alexey Bosov; Gregory Miller

11.00 – 13.00 Session IB: Mobile 'ad hoc' networks, security, and clouds

1570158509	Suitability of MANET Routing Protocols for the Next-generation National Security and Public Safety Systems	Pavel Masek; Ammar Muthanna; Jiri Hosek
1570140851	Analysis of Approaches to Internet Traffic Generation for Cyber Security Research and Exercise	Tero Kokkonen; Timo Hämäläinen; Marko Silokunnas; Jarmo Siltanen; Mikhail Zolotukhin; Mikko Neijonen

1570155803	CloudWave smart middleware for DevOps in Clouds	Oscar Rodríguez Rocha; Boris Moltchanov
1570158455	Data mining approach for detection of DDoS attacks utilizing SSL/TLS protocol	Mikhail Zolotukhin; Timo Hämäläinen; Tero Kokkonen; Antti Niemela; Jarmo Siltanen
1570150313	An Applicability of AODV & OLSR Protocols on IEEE 802.11p for City Road in VANET	Raj Jaiswal; Jaidhar CD

13.00 – 14.00 Lunch

14.00 – 16.30 Session IIA: Sensor networks and IoT

1570161791	State of the Art and Research Challenges for Flying Ubiquitous Sensor Networks	Ruslan Kirichek; Andrey Koucheryavy; Andrey Vladyko
1570158535	A Practical Implementation of a Cooperative Antenna Array for Wireless Sensor Networks	Edison Pignaton de Freitas; Ricardo Kehrlé Miranda; Marco Marinho; Joao Paulo Carvalho Lustosa da Costa; Carlos E Pereira
1570156357	Coverage & Connectivity and Density criteria in 2D and 3D Wireless Sensor Networks	Nasser Al-qadami; Andrey Koucheryavy
1570148937	Internet Connection Sharing through NFC for Connection Loss Problem in Internet-of-Things Devices	Ismail Turk; Ahmet Cosar
1570154857	Clustering algorithm for 3D wireless mobile sensor network	Pavel Abakumov; Andrey Koucheryavy
1570158599	Optimization of the UAV's Motion Trajectory in Flying Ubiquitous Sensor Networks (FUSN)	Ruslan Kirichek; Alexander Paramonov; Karine Varedzhian
1570159383	Reliable and Scalable Architecture for Internet of Things for Sensors Using Soft-Core Processor	Rajendra Gad

14.00 – 16.30 Session IIB: Cellular systems

1570167405	Modelling and Performance Analysis of Multicast File Repair in 3GPP	Konstantin Samouylov; Irina A. Gudkova; Darya
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	LTE Networks	Ostrikova
1570157695	LTE Positioning Accuracy Performance Evaluation	Grigoriy Fokin; Mstislav Sivers
1570181981	On Capturing Spatial Diversity of Joint M2M/H2H Dynamic Uplink Transmissions in 3GPP LTE Cellular System	Amir Ahmadian, Olga Galinina, Irina Gudkova, Sergey Andreev, Sergey Shorgin, and Konstantin Samouylov
1570158557	Performance Evaluation of Methods for Estimating Achievable Throughput on Cellular Connections	Lars M Mikkelsen; Tatiana Madsen; Nikolaj Højholt
1570158649	Alternating priorities queueing system with randomized push-out mechanism	Alexander Ilyashenko; Oleg Zayats; Vladimir Muliukha; Alexey Lukashin
1570158467	An Analytical Approach to SINR Estimation in Adjacent Rectangular Cells	Vyacheslav Begishev; Roman Kovalchukov; Andrey Samuylov; Aleksandr Ometov; Dmitri Moltchanov; Yuliya Gaidamaka; Sergey Andreev
1570148755	Improving BER Performance of Uplink LTE by Using Turbo Equalizer	Aleksandr Gelgor; Anton Gorlov; Pavel Ivanov; Evgenii Popov; Andrey Arkhipkin; Tatiana Gelgor

16:30 – 17:00 Coffee Break

17:00 – 19:00 Session IIIA: Novel systems and techniques

1570153511	The automated system for collection, processing and transmission of data for training and competitive process in ski jumping	Dmitry Kiesewetter; Konstantin Korotkov; Victor Malyugin
1570157575	A Possible Development of Marine Internet: A Large Scale Cooperative Heterogeneous Wireless Network	Shengming Jiang
1570158471	On Interoperability in Distributed Geoinformational Systems	Elena Velichko; Constantine Korikov; Aleksey Grishentsev; Anatoliy Korobeynikov
1570158065	Cooperative Spectrum Sensing in Cognitive Radio Networks with QoS Requirements	Jerzy Martyna
1570150107	The using of Bluetooth 4.0 technologies for communication with territorial-distributed devices	Pavel Mal'kov; Sergei Elyagin; Vitalii Dement'ev; Nikita Andriyanov
1570159449	Configurable CRC Error Detection Model For Performance Analysis of Polynomial: Case Study for the 32-bits Ethernet Protocol	Rajendra Gad

17:00 – 19:00 Session IIIB: Business and services

1570155573	Project Management Team Structure for Internet Providing Companies	Igor Ilin; Vladimir Gluhov; Anastasia Levina
1570149081	Operations Strategies in Info-Communication Companies	Vladimir Gluhov; Elena Balashova
1570122497	Cellular Telecommunication Services Cost Formation	Tatyana Nekrasova; Valery Leventsov; Ekaterina Axionova
1570158227	Forming a telecommunication cluster based on a virtual enterprise	Gueorguy Kleyner; Aleksandr Babkin
1570155101	Project Controlling in Telecommunication Industry	Svetlana Suloeva; Sergey Grishunin
1570150885	Creation of data mining cloud service on the actor model	Ivan Kholod; Ilya Petuhov; Nikita Kapustin

FRIDAY, August 28, 2015

09:00 – 12:00 Session IVA: Signals and circuits

1570145967	Efficiency of nonorthogonal multifrequency signals coherent detection while applying modified algorithm based on decision diagram	Sergey Zavjalov; Sergey Makarov; Sergey V Volvenko; Anastasia Balashova
1570150659	Instantaneous Frequency Measurement Receiver performance analysis for AM, FM signals	Dmitrii Kondakov; Alexander Lavrov
1570156457	Using the DFT-based detection method for ASK-manipulated SEFDM signals	Alexandr Kislitsyn; Andrey Rashich
1570157903	Combined Adaptive Spatial-Temporal Signal Processing System Based on Sequential Circuit with Interdependent Component Adaptation	Vladimir Grigoryev; Igor Khvorov; Anna Shchesniak
1570158023	Waveform optimization of SEFDM signals with constraints on bandwidth and an out-of-band emission level	Sergey Zavjalov; Sergey Makarov; Sergey V Volvenko; Wei Xue
1570158277	Analyze of Quantum Fourier Transform Circuit Implementation	Constantine Korikov; Ivan Murashko
1570157355	On the Synthesis of Optimal Finite Pulses for Bandwidth and Energy Efficient Single-Carrier Modulation	Aleksandr Gelgor; Anton Gorlov; Evgenii Popov
1570158609	Optimal input power backoff of a nonlinear power amplifier for SEFDM system	Dmitrii Fadeev; Andrey Rashich

09:00 – 12:00 Session IVB: Optical and satellite systems

1570147449	Investigation of Key Components of Photonic Beamforming System for Receiving Antenna Array	Sergey Ivanov; Alexander Lavrov; Igor Saenko
1570146993	All-optical 4-channel demultiplexer with an arbitrary access for full C+L spectral range	Viktor Petrov
1570157145	Implementation of Digital Demodulation for Fiber Optic Interferometer Sensors	Andrei Medvedev
1570147071	Optical coder with a synthesized transfer function for optical communication lines	Viktor Petrov
1570157937	Fiber-optics system for the radar station work control	Natalia Sharova; Elena Fedorova; Vadim Davydov; Evgenia Gilshteyn; Kirill Malanin; Igor Fedotov; Anton Karseev
1570148765	Optimization of Angle-of-Arrival GPS Integrity Monitoring	Igor Tsikin; Antonina Melikhova
1570158055	Ultra-Wideband Feed for Radio Telescope of a New-Generation Radio Interferometric Network	Vitaliy Chernov; Alexander Ipatov; Vyacheslav Mardyshkin; Sergey Ivanov; Artem Roev
1570151063	Improvement frequency stability of caesium atomic clock for satellite communication system	Alexander Petrov; Vadim Davydov
1570158607	Cyber-physical Approach in a Series of Space Experiments "Kontur"	Vladimir Zaborovski; Vladimir Muliukha; Alexander Ilyashenko

12:00 – 12:30 Coffee Break

12:30 – 14:30 Session V: Advanced materials and their properties

1570158311	Reflectivity properties of graphene-coated silica	Constantine Korikov
1570158389	Nano Communication Device with Embedded Molecular Films: Effect of Electromagnetic Field and Dipole Moment Dynamics	Elena Velichko; Oleg Tsybin; Tatiana Zezina; Anastasia Cheremiskina
1570158399	Nano-device with an embedded molecular film: mechanisms of excitation	Oleg Tsybin
1570124629	AC-conductivity analysis of La _{1-x} Sr _x F _{3-x} superionic films	Alexey Filimonov; Ekaterina Koroleva; Tikhon Vergentev; Lutz Rissing
1570158675	Studies of Biomolecular Nanomaterials for Application in Electronics and Communications	Elena Velichko; Elina Nepomniashchaia; Maxim Baranov; Anastasia Cheremiskina; Evgeni Aksenov

1570124647 Ultrabroadband dielectric spectroscopy of lead-free relaxor
ferroelectric $\text{Na}_{1/2}\text{Bi}_{1/2}\text{TiO}_3$

Alexey Filimonov; Alexander Naberezhnov; Ekaterina
Koroleva; Sergej Vakhrushev; Tikhon Vergentev

14:30 - 14:45 Conference closing