**3rd Algorithm Workshop**

***provided by Huawei Russian R&D Center***

***and***

***Sank-Petersburg University for Aerospace Instrumentation***

Venue: Ambassador Hotel

Place: Sankt-Petersburg, Russia

Date: June 9, 2016

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 9:30-9:45 | **Workshop Introduction**  *Vladimir Ivanov, Russian Huawei R&D Center* | | | |
|  | **Panel Discussions** | | | |
|  | ***Channel Coding and Spectrum Efficiency***  Moderator: Alexey Maevsky | ***Machine Learning and Network Optimization***  Moderator: Mikhail Pikhletsky | [***Medi***](http://www.digi-capital.com/news/2015/04/augmentedvirtual-reality-to-hit-150-billion-disrupting-mobile-by-2020/)***a Technology & Big Data***  Moderator: Eugeny Vorovyev | |
| 9:45-10:30 | **Alexey Maevsky**  **Igor Punkov**  **Vladimir Lyashev**  Huawei RRC  ***PHY algorithms*** | **Mikhail Pikhletsky**  Huawei RRC  ***Network Optimization Math Problems*** | **Eugeny Vorobyev**  Huawei RRC  ***Media Algorithms*** | |
| 10:30-11:15 | **Eugeny A. Krouk**  Prof., Dr. Sc., Saint-Petersburg University of Aerospace Instrumentation  **Andrey M. Turlikov** Doctor of Science, Head of Department of Information and Communication Systems, St. Petersburg State University of Aerospace Instrumentation  ***Usage of Error-Correcting Coding Methods for Efficiency Improvements in 5G Networks*** | **Danila Doroshin**  Huawei RRC  ***Machine Learning Problems*** | **Alexander Slesarenko, Peter Krinov**  Huawei RRC  ***Big Data*** | |
| 11:15-11:30 | *Coffee Break* | | | |
| 11:30-12:00 | **Sergey V. Bezzateev,** Prof., Dr. Sc.  **Alexandra Afanasyeva**  Department of Information Security Technologies,   Saint-Petersburg University of Aerospace Instrumentation  ***Private information retrieval protocol based on algebraic structures.*** | **Konstantin K. Simonchik**  Speech Technology Center, Head of Department / Professor at National Research University of Information Technologies, Mechanics and Optics  ***Complex problems of biometric technologies and advanced solutions*** | **Alexey A. Karpov** Prof. Dr.Sc. , SPIIRAS  ***Multimodal human-computer interfaces created in SPIIRAS*** | |
| 12:00-12:30 | **Peter  V. Trifonov,** Ass. Prof., PhD., Saint-Petersburg Politechnical University  ***Chained polar subcodes*** | **Sergey I. Nikolenko** Professor at Higher School of Economics  Researcher at Steklov PDMI , St Petersburg  ***Survey on Deep Learning applications to NLP*** | **Konstantin F. Glasman,** Prof. Dr. Sc., Saint Petersburg State University of Film and Television  ***Multimodal Quality Assessment of Compressed Television Material for Mobile Devices*** | |
| 12:30-13:00 | **Sergey V. Bezzateev,** Prof., Dr. Sc., Saint-Petersburg University of Aerospace Instrumentation  **Konstantin Zhidanov**  Saint-Petersburg University of Aerospace Instrumentation  ***Special class of codes for digital watermarking*** | **Andrey M. Turlikov** Doctor of Science, Head of Department of Information and Communication Systems, St. Petersburg State University of Aerospace Instrumentation  **Anton I. Veselov** PhD, Department of Information and Communication Systems, St. Petersburg State University of Aerospace Instrumentation  ***Machine-learning-related research activities of SUAI visual data processing group.*** | **Innokenty Zhdanov**  Department of Computer Photonics and Videomatics,  ITMO University.  ***Image processing and recognition  research*** | |
| 13:00-14:00 | *Lunch* | | | |
| 14:00-14:30 | **Ivan Piatak**  **Alexander Korotkov**  Prof. Dr., Head of Integrated Electronics Department Peter the Great St. Petersburg Polytechnic University  ***Pipelined ADC with digital error calibration and correction*** | **Sergey I. Nikolenko** Professor at Higher School of Economics  Researcher at Steklov PDMI  ***Buffer Management for Packets with Multiple Characteristics*** | **Andrey N. Terekhov**Prof.  Dr.Sc., Saint-Petersburg State University  **Alexander  Pimenov**  Ph.D,  Computer Vision Technology  ***The multi-reconstructed as a source of geometric data for simulated and augmented reality*** | |
| 14:30-15:00 | **Elena B. Solovyeva** PhD, Saint-Petersburg Electrotechnical University, “LETI” head of department  ***"Mathematical Methods For Synthesis of Nonlinear Filters and Transformers*** | **Nikolai K. Krivulin** Doctor of physico-mathematical sciences, Associate Professor, Mathematics and Mechanics Department, St. Petersburg State University  ***Tropical optimization: new solutions to old problems*** | **Andrey A.Fillchenkov** ITMO, Head of Machine learning department  ***Machine learning: application of deep neural networks and automated model selection.*** | |
| 15:00-15:30 | **Alexander B. Sergienko** PhD, Saint-Petersburg Electrotechnical University, “LETI”  ***Blind Estimation of Signal Parameters as a Source for Spectral and Energy Efficiency Increase*** | **Oleg N. Granichin** Prof. , Doctor of physico-mathematical sciences, Mathematics and Mechanics Department, St. Petersburg State University  ***Stochastic Programming and Multiagent Technologies*** | **Boris A. Novikov** ST. Petersburg  State University, Dept. of Analytical Information Systems  ***Deat Management and Data Analytics: Research and Potential*** | |
| 15:30-15:45 | *Coffee break* | | | |
| 15:45-17:45 | ***Round Table***   * Warm-up questions * Discussion | ***Round Table***   * Warm-up questions * Discussion | | ***Round Table***   * Warm-up questions * Discussion |
| 17:45-18:00 | **Workshop Wrap-up and Closure** | | | |
| 18:00-19:30 | *Dinner* | | | |