

2015 14th RoEduNet International Conference – Networking in Education and Research (RoEduNet NER 2015)

**Craiova, Romania
24-26 September 2015**



**IEEE Catalog Number: CFP1509K-POD
ISBN: 978-1-4673-8181-9**

Contents

LLDP Packet Generator	7
<i>Alexandru Nicolae, Laura Gheorghe, Mihai Carabas, Nicolae Tapus, Cristina-Loredana Duta</i>	
SDN-based Security Mechanism	12
<i>Mihai-Nicolae Aneci, Laura Gheorghe, Mihai Carabas, Stefan Soriga, Raluca-Andreea Somesan</i>	
Porting Android on Intel-based Embedded Platforms.....	18
<i>Irina-Ioana Pătru, Mihai Carabaş, Laura Gheorghe, Ştefan Gabriel Şoriga, Nicolae Țăpuş</i>	
Teaching virtualization laboratories in higher education	23
<i>Valeriu Manuel Ionescu, Gabriel V. Iana</i>	
Strengthening Compute and Data Intensive Capacities of Armenia	28
<i>Hrachya Astsatryan, Vladimir Sahakyan, Yuri Shoukourian, Pierre-Henri Cros, Michel Dayde, Jack Dongarra, Per Oster</i>	
A multimodal affective monitoring tool for mobile learning	34
<i>Kuderna-Iulian Bența, Marcel Cremene, Mircea-Florin Vaida</i>	
An experimental comparison of Chen et al. and Bruß quantum key distribution protocols	39
<i>Gabriela Mogos</i>	
Test bench for routing optimization algorithms in Proxy Mobile IPv6 environments.....	44
<i>A. Peculea, V. T. Dădârlat, E. Cebuc, B. Iancu</i>	
Parallelization of Similarity Matrix Calculus in Ontology Mapping Systems	50
<i>Felicia Gîză-Belciug, Ştefan-Gheorghe Pentiuc</i>	
Groupware Refinements for Collaborative Teams.....	56
<i>Mircea-Florin Vaida, Kuderna-Iulian Bența</i>	
Automated User Documentation System for Android.....	63
<i>Florin B. Manolache, Yifan Li, Octavian Rusu</i>	
New Technologies Implementation in RENAM National Backbone.....	68
<i>Peter Bogatencov, Grigore Secrieru, Anatol Goncearuc, Maxim Orbu, Pavel Rosca</i>	
Seeker: A Serious Game for Improving Cognitive Abilities.....	73
<i>Irina Toma, Mihai Dascalu, Stefan Trausan-Matu</i>	
End-to-End Delay Minimization in an Application-Aware Routing for Wireless Sensor Networks	80
<i>Anamaria Comsa, Justin Ivanciu, Eduard Luchian, Virgil Dobrota, Kris Steenhaut</i>	
Scratch and recreational coding for kids.....	85
<i>Laura Coravu, Marius Marian, Eugen Ganea</i>	
Analyzing Students Pauses During Reading and Explaining a Story	90
<i>Sibel Denisleam (Molomer), Stefan Trausan-Matu, Philippe Dessus & Maryse Bianco</i>	
Auto-Generating Google Blockly Visual Programming Elements for Peripheral Hardware.....	94
<i>Ioana Culic, Laura Mihaela Vasilescu, Alexandru Radovici</i>	
Integrated Scientific Computing infrastructure in Moldova	99
<i>Peter Bogatencov, Nicolai Iliuha, Nichita Degteariov, Grigorii Horos</i>	
Increasing energy efficiency of a building with minimal computational demands using Model Predictive Control.....	103
<i>Giorgian Neculoiu, Valentin Sgarciu, Alexandru Viorel Marinescu, Mariana Marinescu</i>	
Intrusion Detection using Alert Prioritization and Multiple Minimum Supports	109
<i>Catalin Mironeanu, Mitica Craus, Cristian Nicolae Butincu</i>	
Virtualization of VoIP laboratories.....	115
<i>Gabriel V. Iana, Valeriu Manuel Ionescu</i>	
Testing the performance of the improved Rubik's cube encryption algorithm on virtual systems.....	121
<i>Valeriu Manuel Ionescu, Adrian-Viorel Diaconu</i>	
Virtualizing real servers with unsupported OS by VMware vCenter Converter v6	127
<i>Ionel Gordin</i>	
The analysis of the performance of RabbitMQ and ActiveMQ.....	132
<i>Valeriu Manuel Ionescu</i>	

A Generic Model for Cloud Data Interchange	138
<i>Alina Andreica, Florina Covaci, Josef Küng</i>	
Shared memory parallelization of the Conjugate Gradient linear system solver of a FEM topology optimization code	143
<i>Albert Zaharovits, Silvia Stegaru, Mihai Carabaş, Emil-Ioan Slușanschi, Mihai-Victor Pricop</i>	
Visualization System for Human Mobility Analysis	152
<i>Adriana Drăghici, Taygun Agiali, Cristian Chilipirea</i>	
Budget Constrained Selection of Cloud Storage Services for Advanced Processing in Datacenters	158
<i>Catalin Negru, Florin Pop, Ovidiu Cristian Marcu, Mariana Mocanu, Valentin Cristea</i>	
Designing a modern user experience for a human resources website	163
<i>Sabin-Mihai Simionescu</i>	
Enhancing Property and Type Detection for a QA System over Linked Data	167
<i>Bogdan Nicula, Stefan Ruseti, Traian Rebedea</i>	
Mapping interdependent tasks in a computational environment using genetic algorithms	173
<i>Adrian Alexandrescu</i>	
A Comparison of Semantic Similarity Techniques for a Corpus of CSCL Chats	178
<i>Marius-Gabriel Gutu, Traian Rebedea, Stefan Trausan-Matu</i>	
An Improved Version of the Frequent Itemset Mining Algorithm	184
<i>Cristian Nicolae Bușincu, Mitică Craus</i>	
How to build a honeypot System in the cloud	190
<i>Lihet Marius Alin, Pr. Dr. Ing. Vasile Dadarlat</i>	
Smart University, a new concept in the Internet of Things	195
<i>Marian Cață</i>	
Implementation and Optimization of a Somewhat Homomorphic Encryption Scheme	198
<i>Andrei Ciocan, Sergiu Costea, Nicolae Țăpuș</i>	
Open Source Oscilloscope for Hobby Users	205
<i>Vlad Niculescu, Adrian Ioan Liță</i>	
Solving the Top-K problem for Sequence Counting Using Differential Privacy	208
<i>Sergiu Costea, Nicolae Țăpuș</i>	
Monitoring of Social Networking Sites	214
<i>George Suci, Bogdan Florin Albu, Sergiu Ionut Stefan, Victor Suci, Simona Halunga, Omar Abdulwahabe Mohamad, Rasha Talal Hameed, Cristina Butca</i>	
Integrating Telemetry Sensors with Cloud Computing	218
<i>George Suci, Victor Suci, Valentina Cirstea, Alexandra Focsa, Simona Halunga, Omar Abdulwahabe Mohamad, Ștefan Ciprian Arseni, Cristina Butca</i>	
Three Omni-wheel Ballbot Optimum Implementation	223
<i>Iulian Calciu, Laura Mihaela Vasilescu, Adriana Drăghici, Daniel Rosner, Monica Pătrașcu</i>	
Self-defining SLA infrastructure in BSS cloud deployments	228
<i>Ioan Drăgan, Răzvan Daniel Zota</i>	
Android application that controls Internet of Things devices	233
<i>Elena-Andreea Stoican, Alexandru Radovici, Alexandru Văduva</i>	
Portable Audio-Modulated Tesla Coil for Demonstrative Actions	238
<i>Constantin-Daniel Ghilință, Silvia Cristina Stegaru, Traian Popeea, Nicolae Țăpuș</i>	
Control system enhancement for robots based on brushless motors	242
<i>Sorana Rapițeanu</i>	
The influence of genetic operators in a Genetic Algorithm used for estimating the energy consumption in a Passive House	248
<i>Silvia Cristina Stegaru, Emil Ioan Slușanschi, Nicolae Țăpuș, Mihail-Bogdan Căruțașiu, Constantin Ionescu, Adrian Badea</i>	
Performance Improvement through Virtualization	253
<i>Cătălina Mancaș</i>	