

Conference Program



Bern, Switzerland
November 17-19, 2017

Conference Location:

Sternen Muri Hotel
Thunstrasse 80, 3074 Bern - Muri, Switzerland
<http://www.sternenmuri.ch/>

Friday 17th November 2017

Conference Room: A

Time: 08:45-09:00

Welcome and opening speech by Assoc. Professor Nikolaos Bardis, Hellenic Military Academy, Greece

Conference Room: A

Time: 09:00-09:30

Plenary Lecture 1:



Stability of Interval Positive Fractional Continuoustime Linear Systems

by Prof. Tadeusz Kaczorek, Faculty of Electrical Engineering, Warsaw University of Technology, POLAND.

Conference Room: A

Time: 09:30-10:00

Plenary Lecture 2:



Conservation Laws and Exact Solutions for a Generalized BBM-Like Equation

by Prof. Maria S. Bruzón, University of Cádiz, SPAIN.

10:00-10:30: Coffee Break

Friday 17th November 2017

Conference Room: A

Time: 10:30-12:30

EECS '17: Algorithms for Signal Processing

Chair: Hae-Yeoun Lee, Khalid A. Darabkh

| | | |
|--|--|----------|
| A Metamodel Composition Driven Approach to Design New Domain Specific Modeling Languages | Anas Abouzahra, Ayoub Sabraoui, Karim Afdel | eecs-128 |
| Deep Learning-Based Steganalysis against Spatial Domain Steganography | Dong-Hyun Kim, Hae-Yeoun Lee | eecs-232 |
| BAIPAS: Distributed Deep Learning Platform with Data Locality and Shuffling | Mikyong Lee, Sungho Shin, Sa-Kwang Song | eecs-249 |
| A Software Measurement Plan Management Guided by an Automated Metrics Suggestion Framework | Sarah A. Dahab, Juan José Hernández Porras, Stephane Maag | eecs-265 |
| A New Algorithm for a Public Key Cryptosystem Using Elliptic Curve | Nissa Mehibel, M'hamed Hamadouche | eecs-177 |
| AnnoBic the Annotation of Arabic RSS Feeds | Hanaa Ghareib Hendi, Ehab E. Hassanein | eecs-276 |
| Interval Entropy Profile Method Based on Maximum Entropy Principle for Estimating Evolutionary Information Content in Genetic Sequences for their Comparison | Uddalak Mitra | eecs-198 |
| A Novel Speech Recognition System for People with Physical Disabilities | Khalid A. Darabkh, Laila Haddad, Saadeh Swidan, Mohammed Hawa, Ramzi Saifan, Sharhabeel H. Alnabelsi | eecs-181 |
| Topographical-Geodetic Data for Tactical and Technical Control of Artillery Fire | M. Blaha, K. Šilinger, B. Přikryl | eecs-167 |

Friday 17th November 2017

Conference Room: B

Time: 10:30-12:30

EECS '17: Algorithms in Engineering Sciences

Chair: Jung-Ja Kim, Veska Gancheva

| | | |
|--|--|----------|
| Analysis of Pediatric Foot Disorders using Decision Tree and Neural Networks | Jungkyu Choi, Hee-Sang Lee, Jung-Ja Kim | eecs-253 |
| Alvis Data Graphs | Marcin Szpyrka | eecs-246 |
| Performance Evaluation of Hybrid Parallel Multiple Sequence Alignment on the Supercomputer JUQUEEN | Plamenka Borovska, Veska Gancheva, Ivailo Georgiev | eecs-259 |
| Optimal Hydropower Production for Xin'anjiang Hydropower Station Using Future Scenarios | Muhammad Zaman, Shouqi Yuan, Junping Liu, Muhammad Imran Nawaz, Jinghong Wan, Yangfan Li | eecs-243 |
| Mission Possible: A Gamified Approach to Handle Cancer Survivors Stress | Asmaa A. Shalaby, Nahla Barakat | eecs-264 |
| A Comparison of Small Area Estimation & Kriging in Estimating Rainfall in Sri Lanka | Kalum Udagepola, Mithila Perera | eecs-236 |
| Improve Customer Experience Based on Recommendation and Detection of a Pattern Change in Eating Habits | W. Velasquez, Andres Munoz-Arcentales, Andreina Montoya, M. Chalen | eecs-239 |
| Survival Analysis of People with Cardiac Problems in a Simulated Earthquake Environment | W. Velasquez, A. Munoz-Arcentales, M. Chalen T., Joaquín Salvachua | eecs-227 |
| A Reliable Relaying Protocol in Wireless Sensor Networks | Khalid A. Darabkh, Mohammed AL-Yabrodi | eecs-174 |

Friday 17th November 2017

Conference Room: A

Time: 12:30-14:30

Title: Applied and Computational Mathematics

Chair: Maria S. Bruzón, Oleg Kosorukov

| | | |
|---|--|-----------|
| Component Connectivity of Crossed Cubes | Litao Guo | 75101-100 |
| An Efficient Method for Simultaneously Reconstructing Robin Coefficient and Heat Flux in an Elliptic Equation Using an MCGM | Talaat Abdelhamid, Olatunji Mumini Omisore | 75101-103 |
| Structuring Digital Plane by the 8-adjacency Graph with a Set of Walks | Josef Slapal | 75101-106 |
| The Algorithm of the Method of Generalized Potentials for the Problems of Optimal Synthesis of Communication Networks | Oleg Kosorukov | 75101-109 |
| Some Results and Open Problems in Applications of Cooperative Games | Cesarino Bertini, Gianfranco Gambarelli, Izabella Stach, Maurizio Zola | 75101-112 |

Friday 17th November 2017

Conference Room: B

Time: 12:30-14:30

Title: Data Networks, Communications, Computers

Chair: Sunmyeng Kim, Obota Monday Elom

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|---|--|-----------|
| A Multi-Dimensional Algorithm Design Approach for Extending the Lifetime of Wireless Sensor Network (WSN) | Obota Monday Elom | 75102-100 |
| Fair MAC Protocol Based on Adaptive DIFS for Underwater Acoustic Sensor Networks | Hyeong-Wook Ahn, Sunmyeng Kim | 75102-103 |
| Adaptive Edge-Directed Interpolation Using Edge Map Analysis | Daejun Park, Jechang Jeong | 75102-109 |
| Modified New Edge-Directed Interpolation Using Window Extension | Seungwoo Wee, Daejun Park, Jechang Jeong | 75102-112 |

14:30-15:00: Coffee Break

Friday 17th November 2017

Conference Room: A

Time: 15:00-17:00

EECS '17: Mathematical Methods and Algorithms

Chair: Eugeny Smirnov, Luiz Souza

| | | |
|---|--|----------|
| Synergy of Computer Modeling of Lateral Surface "Area" of Schwartz's Cylinder | Eugeny Smirnov, Artem Uvarov | eecs-121 |
| Application of Pareto Approach to Improve the State Dependent Riccati Equation (SDRE) Controller Performance | Souza L. C. G., Bigot P., Souza A. G. | eecs-163 |
| A Machine-Learning Based Methodology for Performance Analysis in Particles Accelerator Facilities | Ugo Gentile, Luigi Serio | eecs-212 |
| A New Scaled Secant-Type Conjugate Gradient Algorithm | Issam A. R. Moghrabi | eecs-105 |
| Digital Image Inpainting Using Hybrid Method | Balasaheb H. Patil, Pradeep M. Patil | eecs-109 |
| Bearing Failures Detection in Induction Motors Using the Stator Current Analysis Based on Hilbert Huang Transform | Mohamed-Nacer Saadi, Ghani Redjati, Nouredine Guersi, Messaoud Boukhenaf | eecs-108 |
| Improving Error-Diffused HEVC Intra Prediction | Chien-Hung Chen, Yinyi Lin | eecs-113 |
| About Informational Utility of Investment Project Expertise | Danko E. V., Oskorbin N. M., Ternovoy O. S. | eecs-120 |
| Person Identification Using Fusion of Fingerprint and Hand Geometry | Sampada Abhijit Dhole, Varsha Hemant Patil | eecs-116 |

Friday 17th November 2017

Conference Room: B

Time: 15:00-17:00

EECS '17: Applications of Computers in Mathematical Problems

Chair: Pongsiri Mungporn, Mehrdad Nourani

| | | |
|--|---|----------|
| OCF Healthcare Proof of Concept (PoC) on Libelium MySignals | Hongki Cha, Jonghong Jeon | eecs-255 |
| Realization of All-Optical Sequential Circuit Using Mach Zehnder Interferometer | Umesh Kumar, Ashish Mishra | eecs-104 |
| Evaluation of Gait Characteristic of Elderly People with Visual Impairment based on Plantar Pressure Distirubtion Analysis | Ji-Yong Jung, Chang-Min Yang, Jung-Ja Kim | eecs-252 |
| Day-Ahead Demand Management in Multi-Supplier Power Grid Under Transmission Constraints | Ivan V. Popov, Alexander Yu. Krylatov, Victor V. Zakharov | eecs-122 |
| Differential Flatness-Based Control of Current/Voltage Stabilization for a Single-Phase PFC with Multiphase Interleaved Boost Converters | P. Mungporn, P. Thounthong, S. Sikkabut, B. Yodwong, C. Ekkaravarodome, P. Kumam, N. Bizon, B. Nahid-Mobarakeh, S. Pierfederici | eecs-171 |
| Robust H _∞ Controller of a Nonlinear Unstable System: Robotics Wrist | Youcef Zennir, Mohand Said Larabi | eecs-185 |
| A Comparative Study of PID-PSO and Fuzzy-PID Controller Design for Time Delay System | Youcef Zennir, Mohand Said Larabi | eecs-186 |
| Numerical Simulations of Nanoscale Algan/gan High - Electron Mobility Transistors with A Metal Field-Plated | , Azzedine Telia, Lemia Semra, Ali Soltani | eecs-225 |
| EMG Spectral Analysis for Prosthetic Finger Control | Mehrdad Heydarzadeh, Javad Birjandtalab, Mehrdad Nourani | eecs-230 |

Friday 17th November 2017

Conference Room: A

Time: 17:00-19:00

EECS '17: Applications of Computers in Sciences

Chair: Suwat Sikkabut, Ivo Draganov

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|--|---|----------|
| Differential Flatness Based Control of 3-Phase AC/DC Converter | N. Poonnoy, P. Mungporn, P. Thounthong, S. Sikkabut, B. Yodwong, C. Ekkaravarodome, P. Kumam, N. Bizon, B. Nahid-Mobarakeh, S. Pierfederici | eecs-172 |
| Robust Speech Enhancement Based on Singular Value Decomposition and an Efficient Threshold | Ajgou Riadh, Sbaa Salim, Guendir Said, Guettal Lemya | eecs-213 |
| Music Transcription by Deep Learning with Data and "Artificial Semantic" Augmentation | Vladyslav Sarnatskyi, Vadym Ovcharenko, Mariia Tkachenko, Sergii Stirenko, Yuri Gordienko, Anis Rojbi | eecs-216 |
| CBIR Efficiency Enhancement Using Local Features Algorithm with Hausdorff Distance | Stella Vetova, Ivo Draganov, Ivan Ivanov, Valeri Mladenov | eecs-250 |
| Unsupervised Method for Detection of High Severity Distresses on Asphalt Pavements | Emir Buza, Amila Akagic, Samir Omanovic, Haris Hasic | eecs-141 |

Friday 17th November 2017

Conference Room: B

Time: 17:00-19:00

EECS '17: Data Mining and Algorithms

Chair: Hamza Erol, Semyon Shkundin, Aibassov Yerkin

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|--|--|----------|
| Investigating for Road Roughness Using Smartphone Sensors | Seyed Yousef Sadjadi | eecs-146 |
| Acoustic Devices for Breathing Investigations | Semyon Shkundin, Valentina Rumyantseva | eecs-145 |
| An Improved Security Architecture for an InterCloud Reference Model | Cherif Ghazel, Yosra Abassi, Leila Saidane | eecs-153 |
| Improving Image Processing Functions by Loop Fusion | Shapour Joodi, Manoochehr Joodi Bigdello, Shahla Aslani Asl | eecs-151 |
| The Derivation of the Equation of Hyper-Behavior, which Includes Hyper-Thinking and Hyper Consciousness | Aibassov Yerkin, Yemelyanova Valentina, Nakisbekov Narymzhan, Bulenbayev Maxat | eecs-148 |
| The Application of a Single Algorithm for Filtering Different Noise in the Image | Astrit Hulaj, Adrian Shehu, Xhevahir Bajrami | eecs-158 |
| Data Mining Models for Selection of the Best Spectral Reflectance Indices in Estimation of Crop Yields and Classification of Maize Hybrid Types Using SpectroRadiometer Data | Hamza Erol, Celaleddin Barutçular, Ayman El Sabagh, Recep Erol | eecs-139 |
| Combined Enhanced LWSE Algorithm with OTP Algorithm for Secure Database | Kaladhar Ganta, Bing Zhou | eecs-144 |
| Some Statistical Study on the Short-Time Spectrum of Unvoiced Pronunciation Signal | Xiaodong Zhuang, Nikos. E. Mastorakis | eecs-280 |

Poster

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|--|--|----------|
| Micrographic Image Segmentation Using Active Contour Model Based on Possibilistic C-Means Clustering | Nabil Chetih, Naim Ramou, Zoubeida Messali, Amina Serir, Yamina Boutiche | eecs-162 |
| Detection of Defects Using Open-Ended Coaxial Probe | H. Amar, H. Ghodbane, M. Amir, Z. Guezoui, M. Zergoug, S. Azzi | eecs-168 |
| Acoustic Emission Source Localization in Plate-Like Structure | El Yamine Dris, R. Draï, A. Benammar, D. Berkani | eecs-135 |

Saturday 18th November 2017

Conference Room: A

Time: 09:00-09:30

Plenary Lecture 3:



Symmetry Analysis, Conservation Laws and Exact Solutions for a Generalized Fisher Equation

by Prof. Maria Luz Gandarias, University of Cádiz, SPAIN.

Conference Room: A

Time: 09:30-10:00

Plenary Lecture 4:



Electromagnetic Cell Communication

by Dr. Daniel Fels, University of Basel, SWITZERLAND.

Conference Room: B

Time: 09:30-10:00

Plenary Lecture 5:



Assessment of Vegetated Envelopes Effect on Urban Microclimates and Building Energy Performance

by Prof. Rafik Belarbi, University of La Rochelle, FRANCE.

10:00-10:30: Coffee Break

Saturday 18th November 2017

Conference Room: A

Time: 10:30-12:30

ISMAEDEH '17: Integrated Systems & Management for Energy, Development, Environment & Health

Chair: Daniel Fels, Badea Lepadatescu

| | | |
|---|---|-----------|
| The Energy-Efficient Development of the Russian Federation Entity: Models and Information Technologies | Gabibulla Khasaev, Vladimir Tsybatov | 75109-115 |
| Optimization of Water Resources Allocation by Integration of Remote Sensing Technology to Geographic Information System in Managing Sustainable Development | A. Nejat Evsahibioglu | 75109-100 |
| A Determinants Analysis of the Michinoeki in Japan | Minoru Kumano, Tsutomu Ito, Takao Ito | 75109-103 |
| Renewable Energy Sources Used in Small Installations to Produce Electricity and to Provide Water for Domestic Supply and Irrigation | Badea Lepadatescu | 75109-112 |
| A Technical Study on Energy Storage and Management for Grid Optimization in Isolated Areas | Thomas Patsialis, Ioannis Kougias, Nicolaos Theodossiou, Peter Droege | 75109-109 |
| Assessing the Performance of Trichardt Wastewater Treatment Plant (South Africa) | Thulani Thokozani Negwamba, Megersa Olumana Dinka | 75109-118 |
| Performance of Modified Bio-filter on Physico-chemical Properties of Water Samples of Naini, Allahabad | Asit Kumar Patel, Ram Bharose, Abhishek James | 75109-106 |

Saturday 18th November 2017

Conference Room: B

Time: 10:30-12:30

EECS '17: Algorithms in Management Systems

Chair: Fabrizio Russo, Cemre Candemir

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|--|--|----------|
| Performance Evaluation of Non-Local Means (NLM) Algorithms for Grayscale Image Denoising | Fabrizio Russo | eecs-251 |
| Comparative Tests of Decision Making Algorithms for a Multiversion Execution Environment of the Fault Tolerance Software | Igor Kovalev, Anna Voroshilova, Vasiliy Losev, Mikhail Saramud, Maria Chuvashova, Aleksandr Medvedev | eecs-242 |
| A Comparative Study on Parameter Selection and Outlier Removal for Change Point Detection in Time Series | Cemre Candemir, Kaya Oğuz | eecs-179 |
| Identification of Nonlinear Discrete Dynamic Systems Using Enhanced Genetic Programming | Rami A. Maher, Mohammad J. Mohammad | eecs-222 |
| Investigating Parallel Implementations of Electronic Voting Verification and Tallying Processes | Israa A. Saadeh, Gheith A. Abandah | eecs-169 |
| Pseudo-CT Generated Through Multi-Metric Image Registration and Atlas Fusion (Application to T1-Weighted Brain MRI) | Wafa Boukellouz, Abdelouahab Moussaoui, Abdelmalik Taleb-Ahmed | eecs-176 |
| Fast Computation of Sample Entropy Based on the Iteration of Neighborhood Matrix | Guiqi Sun, Xiaodong Zhuang, Zhenyan Fan, Nikos E. Mastorakis | eecs-241 |
| Top-N Query Processing with Real-time Entity Resolution | Liang Zhu, Shuaibing Fan, Qin Ma, Weiyi Meng, Haibo Liu | eecs-180 |
| Survey of Current On-Demand Multipath Routing Protocols for Mobile Ad-Hoc Networks | Ibtihel Baddari, Mohamed Amine Riahla, Mohamed Mezghiche | eecs-226 |
| Banking Information System: Residual Risks Modeling | Marie Ndaw, Gervais Mendy, Samuel Ouya | eecs-224 |

Saturday 18th November 2017

Conference Room: A

Time: 12:30-14:30

Title: Education, Development and Environment

Chair: Wang Yanjun, C. Pimentel-Rodrigues, Igor Pustynick

| | | |
|---|--|-----------|
| Urban Design of Historic districts Based on Action Planning | Wang Yanjun | 75107-100 |
| Forecasts of Urban Construction Land Scale Based on Driving Force Analysis | Wang Yanjun, Li Liujun | 75107-103 |
| Non-Governmental Organizations as the Key Actors of Renewal of Rural Territories in Latvia | Dina Bite, Ženija Krūzmētra | 75107-106 |
| Determination of Runoff Coefficients with a View to Integration of Green Roofs with Rainwater Harvesting Systems | C. Pimentel-Rodrigues, A. Silva-Afonso | 75107-109 |
| Barriers and Enablers of Tacit Knowledge Transfer in Australian Higher Education Institutions | Ritesh Chugh | 75111-100 |
| An Augmented Automatic Choosing Control Designed by Extremizing a Combination of Hamiltonian and Lyapunov Functions for Nonlinear Systems | Toshinori Nawata | 75103-100 |
| E-trends in Russian High Education System | Anna Zotova, Svetlana Ashmarina, Elena Kandrashina | 75105-100 |
| Mechanism of Extraction and Use of XBRL Data in Financial Research | Igor Pustynick, Oksana Temchenko, Sergey Gubarkov | 75110-100 |

Saturday 18th November 2017

Conference Room: B

Time: 12:30-14:30

Special Session EECS '17: Advances in the Artificial Intelligence and Cloud Computing Technologies

Chair: Walid Hussein, Ahmed Gawish

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|---|---|----------|
| On the Reliability of Cascade Size as a Virality Measure | Sarah Elsharkawy, Ghada Hassan, Tarek Nabhan, Mohamed Roushdy | eecs-244 |
| GPU_MF_SGD: A Novel GPU-Based Stochastic Gradient Descent Method for Matrix Factorization | Mohamed A. Nassar, Layla Elsayed, Yousry Taha | eecs-254 |
| Towards Shortcoming Limitations of Current Integrity Schemes in the Cloud Environment | Hathout Basma, Ghoniemy Samy, Ibrahim Osman | eecs-257 |
| Improved Driver Drowsiness Detection Model Using Relevant Eye Image's Features | Walid Hussein, M. Samir Abou El-Seoud | eecs-258 |
| A Social Aware Approach for Online Social Networks Data Allocation and Replication | Mohamed Esam Elsaid, Ahmed Shawish, Christoph Meinel | eecs-263 |
| Towards Natural Disasters Detection from Twitter Using Topic Modelling | Mohamed Hagraas, Ghada Hassan, Nadine Farag | eecs-267 |

14:30-15:00: Coffee Break

Saturday 18th November 2017

Conference Room: A

Time: 15:00-17:00

EECS '17: Power Systems

Chair: Eduardo Garcia-Garrido, Boualem Hammache

| | | |
|---|---|----------|
| Identification of Nonlinear Systems | Adil Brouri, Smail Slassi Sennou | eecs-132 |
| Electric Power Distribution Planning Tool Based on Geographic Information Systems and Evolutionary Algorithms | Eduardo Garcia-Garrido, L. Alfredo Fernandez-Jimenez, Montserrat Mendoza-Villena, Pedro M. Lara-Santillan, Pedro J. Zorzano-Santamaria, Enrique Zorzano-Alba, Alberto Falces | eecs-118 |
| A Compact Ultra Wideband CPW-Fed Circular Polarized Slot Antenna | Boualem Hammache, Abderaouf Messai, Mohammed Amin Meriche, Idris Messaoudene | eecs-269 |
| Day-Ahead Probabilistic Photovoltaic Power Forecasting Models Based on Quantile Regression Neural Networks | L. Alfredo Fernandez-Jimenez, Sonia Terreros-Olarte, Montserrat Mendoza-Villena, Eduardo Garcia-Garrido, Enrique Zorzano-Alba, Pedro M. Lara-Santillan, Pedro J. Zorzano-Santamaria, Alberto Falces | eecs-119 |
| Asynchronous Machine Set for Electrical Laboratories Part 1: Noise Load | Jaroslav Lokvenc, Rene Drtina | eecs-126 |
| Asynchronous Machine Sets for Electrical Laboratories Part 2: Power Characteristics | Jaroslav Lokvenc, Rene Drtina | eecs-127 |
| Design & Analysis of Cycloconverter to Run Split Phase Induction Motor Using PWM Control | Iftakher Ahmed, Shubhalaxmi Kher | eecs-102 |
| A Simple BJT Based Circuit for Generating Chaotic Oscillations and Double-Scroll Attractors | Umesh Kumar, Anshuman Chhabra | eecs-103 |
| Nonlinear Tracking Control of an Underactuated Overhead Crane | Plamen Petrov | eecs-115 |
| Filtering and Denoising Analysis Based on CELP Decoded Speech | Zhenyan Fan, Xiaodong Zhuang, Guiqu Sun | eecs-256 |

Saturday 18th November 2017

Conference Room: B

Time: 15:00-17:00

EECS '17: Applications of Internet of Things and Web services

Chair: Martin Bucker, Kyunghyun Yoon

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|--|--|----------|
| Landscape Painterly Rendering Based On Observation | Dongwann Kang, Kyunghyun Yoon | eecs-191 |
| Additive Manufacturing of a Rheological Characterized Cement-Based Composite Material | Villacís N., Gualavisí M., Narváez-Muñoz C., Carrión L., Loza-Matovelle D., Naranjo F. | eecs-190 |
| Pedagogical Training and Research with video Game for Strengthening in Knowledge Processes | José Eduardo Padilla Beltrán, Yaneth Patricia Caviativa Castro, María Inés Mantilla | eecs-287 |
| Automatic Differentiation of Computer Programs in the Time and Frequency Domain | H. Martin Bucker, Daniel Walther | eecs-187 |
| Soft Computing Modeling of Schools Grouping via Score Data | Ivan Borshukov, Olga Georgieva | eecs-182 |
| Video Games as an Influence in Meaningful Learning | José Eduardo Padilla Beltrán, Yaneth Patricia Caviativa Castro, María Inés Mantilla | eecs-284 |
| Knowledge Base Ontology Building for Fraud Detection Using Topic Modeling | Girija Attigeri, Manohara Pai M. M., Radhika M. Pai, Rahul Kulkarni | eecs-193 |
| Internet of Things within the Service Architecture of Intelligent Transport Systems | Anastasia I. Levina, Alissa S. Dubgorn, Oksana Yu. Iliashenko | eecs-152 |

Saturday 18th November 2017

Conference Room: A

Time: 17:00-19:00

EECS '17: Mathematical Models in Electrical Engineering

Chair: Radu Matei, Lucjan Setlak

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|--|--|----------|
| Fan-Shaped IIR Filters Based on Analog Prototypes | Radu Matei | eecs-203 |
| Comparison of LLC and LCCT Converter Topologies | Michal Prídala, Michal Frivaldský, Seppo J. Ovaska | eecs-140 |
| Demand-Side Management: Profit Function Formulation for Renewable Energy Power Market | Mohammad Abolhasanpour, Amir Abolfazl Suratgar | eecs-235 |
| Mathematical Models and Simulation of key Multi- Pulse Rectifiers in field of Autonomous Electric Power Supply System, using Matlab/Simulink Programming Environment Compatible with the Concept of a More Electric Aircraft (MEA) | Lucjan Setlak, Rafał Kowalik, Wojciech Redo | eecs-205 |
| A Design for Online Low Power Eye Pressure Measurement System Based on MEMS Capacitors Array | Mohammad Abbasi, Amir Abolfazl Suratgar | eecs-234 |
| Ternary CMOS Standard Cell Design | N. Khairudin, A. Abdul Aziz, M. T. A. Mohd Mabror | eecs-164 |
| Modified GDI Based Time to Digital Converter | Ranjani Aruna A., J. Kamala | eecs-200 |
| Life Expectancy and Future Performance of SiR and EPDM Nonceramic Insulators Through FTIR Spectroscopy and Analytical Methods | M. F. AlHajri | eecs-154 |
| MUSIC Extracted Direction of Arrival Estimates Using Spatial Smoothing Improvement for Indoor Localization Using RFID | Zier Adel, Fergani Lamy | eecs-170 |

Poster

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| Preparation and Characterization of Activated Carbon by Chemical Activation under Inert Atmosphere | Funda Ateş, Beyza Sarıcaoğlu | 75113-100 |
|--|------------------------------|-----------|

20:00: Conference Dinner

Sunday 19th November 2017

Conference Room: A

Time: 09:00-11:00

EECS '17: Numerical Methods and Computers

Chair: Jozef Kapusta, Aldina Correia

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|---|---|----------|
| Quality of Extracted Sequential Rules by Session Identification Using STT and Cookies | Jozef Kapusta, Michal Munk, Dominik Halvoník | eecs-207 |
| Smart Home Energy System Modeling and Implementation | Jawad Lotfi, Farid Abdi, Mohamed Fouad Abbou | eecs-195 |
| A Penalty Based Filters Method in Direct Search Optimization | Aldina Correia, João Matias, Pedro Mestre, Carlos Serodio | eecs-211 |
| Implementation of Enhanced Shortest Path Algorithm for Passively Localized Robot Mobile Robot for Warehouse Automation (MRWA) | Hasan Habib, Saad Waseem, Abdul Hannan Ghafoor, Waqar | eecs-209 |
| Adaptation of the Analysability Metric for the Automotive Domain | Yanja Dajsuren, Eric Bouwersy, Harald Altingerz | eecs-208 |
| Exact Computations as Background for Numerical Methods | Valentin Golodov | eecs-204 |
| Peptide Poset Mining for Antiviral Target Regions in Human Rhinovirus | Uddalak Mitra | eecs-199 |
| Contours of Combinatorial Super-Pixel Grouping for Object Extraction | Hong Cheng, Yuhua Luo, Yunjiang Yu | eecs-107 |
| Generating and Estimating Nonverbal Alphabets for Situated and Multimodal Communications | Serhii Hamotskyi, Sergii Stirenko, Yuri Gordienko, Anis Rojbi | eecs-219 |

Sunday 19th November 2017

Conference Room: B

Time: 09:00-11:00

EECS '17: Renewable Energy Sources and Environment

Chair: Michal Frivaldsky, Josef Haunschmied

| | | |
|--|---|----------|
| Hand Pose Estimation with CNN-RNN | Zhongxu Hu, Youmin Hu, Bo Wu, Jie Liu | eecs-125 |
| Ditto Subsystem : A Case Study for Building Experiment Environment in StarBED Using TopDL | Masatoshi Enomoto, Tomoya Inoue, Kunio Akashi, Shinsuke Miwe, Toshiyuki Miyachi, Daisuke Miyamoto | eecs-215 |
| The Assessment of Wind Speed Distortions in a Simulated Flow Around a Lattice Cellular Communication Mast | Valerijs Bezrukovs, Vladislavs Bezrukovs, Sabine Upnere, Deniss Bezrukovs, Antans Sauhats | eecs-206 |
| Influence of the Passive Shielding on the Optimal Working Point of the Wireless Power Transfer Systems | Michal Frivaldsky, Miroslav Pavelek | eecs-124 |
| A Weighted Minimal Fully Adaptive Congestion Aware Routing Scheme for Network on Chip | Habib Chawki Touati, Fateh Boutekkekouk | eecs-130 |
| Demand-Side Management: Design for Cooperation and Storage Utilization | Nhat Vinh Vo, Klaus Frank, Josef Haunschmied, Raimund Kovacevic, Georg Panholzer | eecs-217 |
| Mitigating the Impact of Malicious Behavior via Utilizing Multiple Routes in a Cooperative Sensing Cognitive Radio Network | Mahmoud Fathy, Ashraf Tammam, Asmaa Saafan | eecs-268 |
| Educational Process Mining: A Systematic Literature Review | Mohamed A. Ghazal, Osman Ibrahim, Mostafa A. Salama | eecs-285 |
| Software System for Automatic Reaction to Network Anomalies and in Real Time Data Capturing Necessary for Investigation of Digital Forensics | Mladen Vukašinović | eecs-106 |
| Integrated LTspice and NS-3 Power Management Simulation for Energy Harvesting | Moner Alsader, Al Savvaris | eecs-194 |

11:00-11:30: Coffee Break

Sunday 19th November 2017

Conference Room: A

Time: 11:30-13:30

EECS '17: Algorithms and Computers in Mechanical Engineering

Chair: Cristian Ravariu, Víctor Castellanos

| | | |
|---|--|----------|
| Static and Dynamic Aspects of Different Tunneling NOI Nanotransistors with Oxide and Vacuum | Cristian Ravariu, Dan Mihaiescu | eecs-143 |
| Stability Analysis and Hopf Bifurcation in an IMC Structure | Víctor Castellanos, Héctor Argote, Ramón E. Chan-López | eecs-214 |
| Low Power Low Noise Amplifier Using RFCMOS 130nm Technology | Maizan Muhamad | eecs-161 |
| Simple Realization of Quadrature Sinusoidal Oscillator with Independent Control | Amornchai Chaichana, Winai Jaikla | eecs-156 |
| Safety Distance Calculations for Macrocell Mobile Base Station and on Site Radiation Measurements | Ibraheem M. Fayed | eecs-157 |
| Smart Grid Platform Modeling | Ibrahim Benabdallah, Mohamed Amine Harabi, Adnène Cherif | eecs-175 |
| Determining Minimum Loading Margin of Power System Using Boundary Equations for Saddle Node Bifurcation | Tao Yi, Yanjie Wang | eecs-282 |
| Design of an Observer PI for an Asynchronous Machine without Mechanical Sensor | Ahmed Chouya, Abdellah Mansouri, Mohammed Chenafa | eecs-281 |

Sunday 19th November 2017

Conference Room: B

Time: 11:30-13:30

EECS '17: Applications of Control Systems

Chair: Khalid A. Darabkh, Ivan Daniel Oviedo

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|--|---|----------|
| A New Cluster Head Replacement Protocol for Wireless Sensor Networks | Khalid A. Darabkh, Wala'a S. Al-Rawashdeh, Raed T. Al-Zubi, Sharhabeel H. Alnabelsi | eecs-173 |
| Development of a Prototype of an Automatic System for Shrimp Farming Using Telecontrol as a Viable Proposal for Small Producers | Ivan Daniel Oviedo, Carlos A. Altamirano, Marcos E. Millan, Nestor X. Arreaga, Vladimir Sanchez Padilla | eecs-178 |
| The Improvement Effect of Muscular Activities in Muscle Strength Imbalance Using Sound Recognition Feedback During Gait | Seung-Rok Kang, Jae-Wook Nah, Chul-Un Hong, Tae-Kyu Kwon | eecs-262 |
| Three-Inputs Single-Output Voltage-Mode Universal Filter with Orthogonal Control Using Single Commercially Available IC | Peerawut Suwanjan, Surapong Siripongdee, Winai Jaikla | eecs-223 |
| A Study on the Effect of Complex Rehabilitation Exercise Methods through Short-Term Active Sling Exercises and Vibration Balls on the Upper Limb Muscle Activity of People with Myelopathy | Juhwan Oh, TaeKyu Kwon | eecs-247 |
| Pumped Storage Power Plant Control System Modeling by Applying VSI and Vector Control Principle | S. M. Hassan Hosseini, Sina Eslami | eecs-129 |
| Identification of Nonlinear Systems Having Nonlinearities at Input and Output (N-L-N) | A. Brouri, M. Benyassi | eecs-131 |
| Novel Method for Control of Non Linear System Based on Negative Acceleration | Tarek Benmiloud | eecs-136 |