Agenda – IIPhDW2017, Łódź, 9-11.09.2017

9.09.2017 (Saturday)

Registration	9.00-12.00		
Opening ceremony	12.00-12.15	The Faculty of Electrical, Electronic, Computer and Control Engineering Authorities	
Invited lecture	12.15-13.00	Krzysztof Kluszczyński	Dlaczego doktorant studiów technicznych powinien być humanistą?
Lunch			
Plenary Session – W1 Chairman: prof. Krzysztof Kluszczyński	14.00-14.20	Mateusz Krzysztoń	The Nodes Cooperation for Maintaining Connectivity of Mobile Ad Hoc Network during Phenomena Cloud Monitoring
	14.20-14.40	Michał Majchrowicz, Paweł Kapusta	Rooting Smart TVs by exploiting design flaws in application framework
	14.40-15.00	Rolando Inglés	A C++ Shared-Memory Inter-Process Communication Framework for High-Throughput Monitoring Systems
	15.00-15.20	Arkadiusz Ambroziak, Magdalena Stasiak-Bieniecka, Piotr Borkowski	Numerical and experimental analysis of heat fluxes in a smart building
	15.20-15.40	Paweł Oleksy, Jarosław Kawecki, Łukasz Januszkiewicz, Robert Kawecki	The measurements of human body impact on transmission channel in wireless body area networks
	15.40-16.00	Jarosław Kawecki, Łukasz Januszkiewicz, Paweł Oleksy, Robert Kawecki	Wearable Inertial Positioning System for Indoor Localization of People
	16.00-16.20	Marcin Pękal, Janusz Frączek	Nullspace Method for the Reaction Forces Uniqueness Analysis in Rigid Multibody Systems with Redundant Nonholonomic Constraints
Coffee break			
Poster Session – P1 Chairmen: dr Jan Mikulka, dr Marek Kciuk	16.40-19:10	Michał Majchrowicz, Paweł Kapusta	System for remote control and management of rooted Smart TVs
		Edyta Rola	The effect of child position in child restraint system on safety
		Fatma Mbarek, Volodymyr Mosorov, Rafał Wojciechowski	Analysis and comparison of load balancing algorithms in homogeneous web cluster
		Ranya Al Darwich, Krzysztof Strzecha, Laurent Babout	A Comparative Study To Extract Physical Properties From Digital Images
		Marwah Bani Saad, Wojciech Bieniecki, Lidia Jackowska-Strumiłło	Algorithms for Automatic Open Questions Scoring in E-Learning Systems
		Leszek Śliwa	Natural Language Processing in Computer Go
		Tomasz Rymarczyk, Tomasz Cieplak, Grzegorz Kłosowski, Paweł Rymarczyk, Daniel Olchowy, Łukasz Gołąbek	Using Petri Nets in Service-Oriented Decision Support Systems in Intelligent Application for Multiply Source Data Analysis
		Tomasz Rymarczyk, Grzegorz Kłosowski	The use of artificial intelligence in smart logistics centre
		Tomasz Rymarczyk, Grzegorz Kłosowski	Monte Carlo Simulation in supply chain risk management
		Tomasz Rymarczyk, Michał Woś, Konrad Kania, Paweł Tchórzewski, Andrzej Stanikowski, Przemysław Adamkiewicz	E-Medicus System for Acquisition and Analysis Medical and Stereoscopic Images
		Tomasz Rymarczyk, Przemysław Adamkiewicz, Konrad Niderla, Karol Duda, Jakub Szumowski, Jan Sikora	Automation of Processes Using Sensor Networks in Intelligent Cyber-Physical System
		Tomasz Rymarczyk, Przemysław Adamkiewicz, Paweł Rymarczyk, Grzegorz Kłosowski, Tomasz Cieplak	Application of artificial intelligence in the supply chain - control processes with product localization
		Piotr Krupski, Michał Aftyka	Overvoltages in the Push-Pull Plasma Power Supply
		Piotr Krupski	The effectiveness of plasma active cooling system which is designed for atmospheric pressure plasma jet reactor
		Abdulla Juwaied, Lidia Jackowska-Strumiłło, Artur Sierszeń	Improved clustering algorithm of LEACH Protocol in IoT Network
		Jakub Pizoń, Tomasz Cieplak	Autonomous production systems in the era of industrial internet of things
Welcome party	22.00-24:00	The Lordi's Club & FooFoo Bar (ul. Piotrkowska 102, GPS: 51.7648633,19.4579782)	

10.09.2017 (Sunday)			
Invited lecture	9.00- 9.40	Petr Drexler	Advances in radiofrequency methods for security diagnostic of high power transformers
Special Plenary Session – W2 - Autonomous Systems, Chairman: prof. Krzysztof Ślot	9.40-10.00	Krzysztof Ślot, Jacek Kucharski, Paweł Kapusta, Piotr Duch, Tomasz Jaworski	Shaping generative network input for controlling rendition of visual objects in adversarial networks
	10.00-10.20	Paweł Maciąg, Paweł Malczyk, Janusz Frączek	Kinematic Synthesis of Planar Robotic Systems
	10.20-10.40	Kazimierz Kiełkowicz	Automatic unsupervised machine learning in latent concept space
	10.40-11.00	Robert Kawecki, Paweł Oleksy, Jarosław Kawecki, Krzysztof Piwowarczyk, Sławomir Hausman, Piotr Korbel	Application of particle filter algorithm for indoor terminal positioning
	11.00-11.20	Andrzej Seul, Krzysztof Okarma	Texture Classification for Autonomous Cleaning Robots
	11.20-11.40	Inovatica	Projects
Coffee break			
Plenary Session – W3, Chairman: dr Mariusz Rząsa	12.00-12.20	Andreas Ahrens, Jelena Zascerinska, David Nicolas Bartolini	Advantages of the Model Based on Gap Processes for Analysing Buyers' Burstiness in E-Business
	12.20-12.40	Marcin Sowa	SubIval computation time assessment
	12.40-13.00	Rastislav Motuz, Petr Drexler	Theoretical investigation of the novel technique dedicated for linear birefringence compensation in fiber optic current sensors
	13.00-13.20	Zuzana Műnsterová, Jana Pařílková, Milan Gomboš	Applications EIS in water management
	13.20-13.40	Jiří Sliž	Embryogenic tissue and culture medium transition detection in MRI image using Perona-Malik filtration
	13.40-14.00	Grzegorz Sypniewski, Krzysztof Okarma	Highly Effective Number Recognition System Dedicated for Industrial Usage
Lunch			
Poster Session - P2, Chairmen: dr Zbigniew Plich, dr Tomasz Rymarczyk	14.45-17.10	Bartosz Kania	Nonlinear PID controller for ionisation gauge
		Dawid Bąk, Przemysław Mazurek	Antenna Control using Assignment Algorithm for Dynamic Distributed Sensory Network
		Grzegorz Drałus, Zbigniew Gomółka, Damian Mazur, Andrzej Smoleń	Seasonal models of energy forecasting in photovoltaic systems using artificial neural networks
		Dariusz Sobczynski	Psim model of single-phase inverter for IGBT transistor power loss analysis
		Tomasz Binkowski	Space Vector Modulation with One-Phase Asymmetry Compensation
		Anita Sowa-Watrak, Mariusz Rząsa	Algorithms Of Image Analysis For Diagnosis Of Welded Connections
		Adam Ilnicki	Selected constructions of low-speed pneumatic motors
		Jarosław Fastowicz, Krzysztof Okarma	Application of the Hough Transform for Automatic Quality Evaluation of 3D Printed Surfaces
		Krzysztof Tomczyk	Approximate Functions for Determining the Integral Square Error Generated by Voltage Output Accelerometer
		Jan Dusek, Jan Mikulka	Using a GPU to Accelerate Electrical Impedance Tomography Algorithms
		Damian Faustryjak, Michał Majchrowicz, Lidia Jackowska-Strumiłło	Remote management of intelligent network infrastructures
		Damian Faustryjak, Michał Majchrowicz, Lidia Jackowska-Strumiłło	Web System Supporting Stock Prices Analysis
		Konrad Miśkiewicz, Laurent Babout, Maciej Niedostatkiewicz, Krzysztof Grudzień, Robert Banasiak	Automatic packing approach of mixed particles for DEM simulation of silo discharging process
		Sebastian Biedroń, Taras Pański, Wolodymir Mosorov	Criminal aspects of cybercrime
		Adam Zywica, Marcin Ziolkowski	Image Reconstruction Quality in Magnetoacoustic Tomography with Magnetic Induction
		Pawel Frankowski	Artificial Experiments in Reinforced Concrete Structures Parameters Identification by the Eddy Current Method
		Pawel Frankowski	The Eddy Current Method for Corrosion Detection in Reinforced Concrete Structures
		Grzegorz Kłosowski, Tomasz Rymarczyk	Using Neural Networks and Deep Learning Algorithms in Electrical Impedance Tomography
Lodz City Tour	17.30-19.30	Starts from the front of the CTI building)	
Conference dinner	20.30-23.00	The Gęsi Puch Restaurant (GPS: 51.751826, 19.450536)	

11.09.2017 (Monday)			
Design Thinking Experience Workshop	9.00-11.20	Laurent Babout / Zdzisława Rowińska	Room 103 (1st floor) - Factory of Enginners XXI century, Faculty of Mechanical Engineering (GPS: 51.754830, 19.451572)
Coffee break			
Special Plenary Session – W4 – Process Tomography, Chairman: prof. Jan Sikora	11.50-12.10	Michał Majchrowicz, Paweł Kapusta, Lidia Jackowska-Strumiłło, Dominik Sankowski	Acceleration of image reconstruction in 3D Electrical Capacitance Tomography in heterogeneous, multi-GPU, multi-node distributed system
	12.10-12.30	Tomasz Cieplak, Tomasz Rymarczyk	Analytical system for EIT images reconstruction with use of microservices architecture
	12.30-12:50	Jakub Szumowski, Tomasz Rymarczyk, Przemysław Adamkiewicz, Tomasz Cieplak, Jan Sikora	Prototype of Hybrid Tomograph for Measurement in Distributed Systems
	12.50 - 13.10	Jakub Szafarz, Mikołaj Woźniak, Andrzej Romanowski, Krzysztof Grudzien, Zbigniew Chaniecki	The design and implementation of interactive visualisation system for ECT data analysis
Lunch			
Poster Session – P3, prof. Dominik Sankowski, dr Petr Drexler	14.00-16.30	Tomasz Rymarczyk, Paweł Tchórzewski	Sensor Networks for Flood Embankment and Landfill in Tomography Imaging
		Karol Duda, Tomasz Rymarczyk, Piotr Bożek, Paweł Tchórzewski, Jan Sikora	EIT Hardware Solution for Data Acquisition
		Tomasz Rymarczyk, Przemysław Adamkiewicz, Krzysztof Polakowski, Jan Sikora	Algorithms for imaging in ultrasound and radio tomography
		Karol Duda, Tomasz Rymarczyk, Piotr Bożek, Przemysław Adamkiewicz	Prototype of ERT Device for Reconstruction of Resistive Distribution at Big Areas
		Tomasz Rymarczyk	Mathematical analysis of topological, shape and material derivatives for electrical tomography
		Jakub Szumowski, Tomasz Rymarczyk, Paweł Tchórzewski, Przemysław Adamkiewicz, Jan Sikora	Prototype of Smart ECT device for data acquisition in Quality Control Systems
		Maciej Pańczyk, Tomasz Rymarczyk, Jan Sikora	Solving Inverse Problem Based on 2-Layer Capacitor as Reference Model of Damp Wall in Tomography Problem
		Edward Kozłowski, Tomasz Rymarczyk, Tomasz Cieplak	Application Elastic Net to Identification of Objects in EIT
		Edward Kozłowski, Tomasz Rymarczyk, Przemysław Adamkiewicz	Applying PLSR to Detection of Objects in Electrical Impedance Tomography
		Konrad Kania, Tomasz Rymarczyk	Quality Control in Production Process - Algorithms for Image Analysis
		Tomasz Rymarczyk, Przemysław Adamkiewicz, Paweł Tchórzewski, Jan Sikora	Electrical Tomography for Innovative Imaging and ROI Monitoring Using Body Surface Potential Mapping
		Paweł Tchórzewski, Tomasz Rymarczyk	Implementation of Numerical Algorithms for Image Reconstruction in Moisture Areas
		Tomasz Rymarczyk, Karol Duda, Jakub Szumowski, Paweł Tchórzewski, Maciej Pańczyk, Jan Sikora	Nondestructive Methods of Data Acquisition to Examine Brick Wall Dampness
		Tomasz Rymarczyk, Przemysław Adamkiewicz, Konrad Niderla, Krzysztof Polakowski, Jan Sikora	Applying Intelligence Algorithms to Building-Automation IoT Sensors
		Adrian Chojecki	Fuzzy logic toolkit for MCU development boards and Arduino-like programming environments: design and evaluation
		Agnieszka Leszczyńska, Aleksandra Kowalska, Krzysztof Grudzień, Andrzej Romanowski, Dominik Sankowski	Pneumatic dense flow modelling and analysis based on ECT data
		Mateusz Miłak, Krzysztof Grudzień, Andrzej Romanowski, Dominik Sankowski	Analysis of Slug Flows in Pneumatic Conveying of Solid based on CCD images processing
		Dawid Sielski, Wiktor Kozakiewicz, Michał Basiuras, Klaudia Greif, Jakub Santorek, Przemysław Kucharski, Izabela Perenc, Krzysztof Grudzień, Andrzej Romanowski	User experience of modern touch surfaces: a comparative study
Closing Ceremony	16.30-17:00	Closing ceremony and Awards	