



ELECTRICAL ENGINEERING AND MECHATRONICS CONFERENCE EEMC'19

Thursday, 9th of May 2019

***Location: Faculty of Engineering, 4028 Debrecen, Ótemető u. 2-4.
Lecture hall U 001***

Conference Chairman: Dr. Géza HUSI

PROGRAM:

09:30 – Opening

PLENARY SESSION (Lecture hall U 001)

Chairman: Dr. Géza HUSI (University of Debrecen, Hungary)

09:30 - 10:00: *Continental*

10:00 - 10:30: *Dr. Csaba SZÁSZ (Romania):* The Intelligent Space Modeled as a Cyber-Physical System.

10:30 - 10:45: *Kovács Bence (Hungary):* Integrated Intelligent Institute in the Perspective of Internet Security.

10: 45 – 11:00: *Aram NASEER (Syria), Dr. Géza HUSI (Hungary):* Choosing the best customized dataset under a fixed deep learning detection model.

11:00 - 11:30: Coffee Break

I. POWERING THE SMART SYSTEMS WITH CONTROL TECHNIQUES AND ENERGY EFFICIENCY SESSION (Lecture hall U 001)

Chairman: Husam Abudlkareem ALMUSAWI (University of Debrecen, Hungary)

11:30 - 11:50: *Dr. Csaba SZÁSZ (Romania):* Solar Tracker Platform for Energy Efficiency Improvement of Photovoltaic Panels.

11:50- 12:10: *Ahmad ALSEBAI (Syria), Syeda Adila AFGHAN (Hungary):* Smart protector & Auto starter control unit for diesel.

12:10 - 12:30: *Addisu Tigabu ALEMAYEHU (Ethiopia):* Development of Ice Removal Method for Train Contact Wires.

12:30 – 12:50: *Dr. Nasar Aldian SHASHOA, Abdurrezag ELMEZUGHY, Ibrahim JLETA and Nasser EKREEM (Libya):* System Identification and Model Validation of Recursive Least Squares Algorithm for Box–Jenkins Systems.

13:00 – 14:30: Lunch Break

II. TECHNOLOGICAL ADVANCEMENT OF TOOLS AND TECHNOLOGIES SESSION (Lecture hall U 001)

Chairman: Timotei István ERDEI (University of Debrecen, Hungary)

14:30 – 15:00: *Erzsébet CSIBI - Account Manager CEE at Pearson Ltd.*

15:00 – 15:20: *Beatrix Katalin SZABÓ (Hungary):* Rigged hand model for the Blender Game Engine.

15:20 – 15:40: *Dániel SALÁNKI, Kornél SARVAJCZ (Hungary):* NI LabVIEW Based Camera System Used for Gait Detection.

15:40 – 16:00: *István KOVÁCS, Kornél SARVAJCZ (Hungary):* Modification and modernization of the FESTO MPS station by extending it to cyber space.

19:00 – *Department of Mechatronics's Evening sponsored by Continental – Only for Guest with Invitation*



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FACULTY OF ENGINEERING

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PLENARY SESSION (Lecture hall U 001)

Chairman: Syeda Adila AFGHAN (University of Debrecen, Hungary)

09:00 - 09:30: Dr. Maamar YAHIAOUI, Bousserhane Ismail ELKHALLILE and Saidi YUCEF (Algeria): Adaptive Backstepping Controller of PMLSM.

09:30 – 09:50: Aram NASEER (Syria), Dr. Péter Tamás SZEMES (Hungary): Object detection and data collection using PCA in LabVIEW.

III. AN ERA OF INTERNET OF THINGS (IoT) AND INDUSTRY 4.0 SESSION (Lecture hall U 001)

Chairman: Dr. Csaba SZÁSZ (University of Cluj, Romania)

09:50 – 10:10: Nazrin RZAYEVA (Azerbaijan): Waste Recycling Process Control with Industry 4.0 Expectations.

10:10 – 10:30: Barbara BORZ, László KRUCSÓ, Timotei István ERDEI, Kapusi Tibor PÉTER and Géza HUSI (Hungary): Designing an ATmega328 microcontroller based gesture-controlled IoT UGV unit and creating a camera system using Linux distribution.

10:30 – 10:50: Rasul SAMADZADE (Azerbaijan): Inverse kinematics and Singularity calculation of 6DOF robot using Artificial Neural Networks.

10:50 – 11: 10: Sarolta OCSENÁS, Zsombor FÜLEKI, Timotei István ERDEI, Attila SZÁNTÓ, Gusztáv Áron SZIKI and Géza HUSI (Hungary): Development of an IoT based Smart meteorological station & horticultural irrigation system's controller using a Raspberry Pi Linux server.

11:10 – 12:00: Dan-Ioan ȚARCĂ, Moldovan Octavian ALIN, Remus GHINCUI, Moldovan Ovidiu GHEORGHE, Traian COSTEA, Polojințef Corbu NICOLAE (University of Oradea): Installing a high capacity sputtering system at University of Oradea.

12:00 – 12:30: Coffee Break

12:30 - Lunch