

July 4, Thursday

8:00 – 16:00 **REGISTRATION** _____

9:00 – 9:30 **OPENING CEREMONY** _____ **Room F09**

9:30 – 10:15 **PLENARY SESSION I** _____ **Room F09**

Tackling Climate Change: A System of Systems Engineering Perspective

Keith W. Hipel

University of Waterloo, Ontario, Canada

Session Chair: *Imre J. Rudas*

10:15 – 10:30 **COFFEE BREAK** _____

10:30 – 11:15 **PLENARY SESSION II** _____ **Room F09**

Intelligent Vehicles

T. T. Lee

Chung Yuan Christian University, Chung-Li, Taiwan

Session Chair: *Shun-Feng Su*

11:15 – 12:00 **PLENARY SESSION III** _____ **Room F09**

Decision Making on Medical Diagnosis based on Subjective and Objective Fuzzy Aggregation Functions Alignment

Hamido Fujita

Iwate Prefectural University, Iwate, Japan

Session Chair: *János Fodor*

12:00 – 13:30 **LUNCH** _____

13:30 – 14:15 **PLENARY SESSION IV** _____ **Room F09**

Distributed Intelligent Systems: Technologies and Applications

William A. Gruver

Simon Fraser University, British Columbia, Canada

Session Chair: *József K. Tar*

14:20 – 15:40 **PARALLEL SESSIONS**

14:20 – 15:40 **[T1a] SESSION on Image Processing and Robot System I** Room F09

Session Chair: *Shun-Feng Su*

14:20 – 14:40 **Enhance Intelligence Video Surveillance with 3-D Information**

Yujen Chou¹, Bor-Chyun Wang² and Shun-Feng Su³

¹NTUST

²China University of Technology CSIE

³National Taiwan University of Science and Technology EE

14:40 – 15:00 **Adaptive Dynamic Surface Control for Fault-Tolerant Multi-Robot Systems**

Yeong-Hwa Chang, Wei-Shou Chan, Cheng-Yuan Yang

Chang Gung University, Taoyuan, Taiwan, R.O.C.

Chin-Wang Tao

National I-Lan University, I-Lan, Taiwan, R.O.C.

Shun-Feng Su

National Taiwan University, of Science and Technology, Taipei Taiwan, R.O.C.

15:00 – 15:20 **Study on Content-Independent Feature Matching Systems for Container Images**

Guo-Rong Huang, Shun-Feng Su, QiJun Chen, Yi-San Lin

15:20 – 15:40 **A Classification System of Lung Nodules in CT Images Based on Fractional Brownian Motion Model**

Po-Whei Huang, Phen-Lan Lin**, Cheng-Hsiung Lee*, C. H. Kuo**

* National Chung Hsing University, Taichung, Taiwan

** Providence University, Shalu, Taichung, Taiwan

14:20 – 15:40 **[T1b] SESSION on Dynamic Estimation and Fuzzy System** Room F08

Session Chair: *Wen-June Wang*

14:20 – 14:40 **Prediction and Sensitivity Analysis by TS Fuzzy Neural Network for Fungal Growth in Food Products**

Yu-Hao Chang, Wen-Hsien Ho*, Hon-Yi Shi*, Jyh-Horng Chou**,****

* Kaohsiung Medical University, Kaohsiung, Taiwan

** National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan

*** National Kaohsiung University of Applied Sciences, Kaohsiung, Taiwan

14:40 – 15:00 **Leader-Following Formation Control of Multi-Robot Systems with Adaptive Fuzzy Terminal Sliding-Mode Controller**

Yeong-Hwa Chang, Cheng-Yuan Yang, Wei-Shou Chan

Chang Gung University, Taoyuan, Taiwan, R.O.C.

Chia-Wen Chang

Ming Chuan University, Taoyuan, Taiwan, R.O.C.

Chin-Wang Tao

National I-Lan University, I-Lan, Taiwan, R.O.C.

15:00 – 15:20 **Fuzzy Control Design for Nonlinear Interconnected Systems by Transforming the Interconnection into a Weighting Linear Term**

Wei Chang, Shan-Ju Yeh, Wen-June Wang, Ya-Ju Chang

National Central University, Jhongli, Taiwan, R. O. C.

15:20 – 15:40 **The People Number Estimation Based on the Embedded DSP System with Surveillance Camera**

Nai-Jen Li, Cheng-Feng Weng, Wen-June Wang

National Central University, Jhongli, Taiwan, ROC

Hsiang-Chieh Chen* and Pei-Jun Lee**

* Industrial Technology Research Institute, Hsinchu, Taiwan, ROC

** National Chi Nan University, Nantou, Taiwan, ROC

14:20 – 15:40 [T1c] SESSION on Knowledge-based Systems Room F07

Session Chair: *Yo-Ping Huang*

14:20 – 14:40 A Guidance Law Design Using the Combination of ISMC and SDRE Schemes

Yew-Wen Liang, Jun-Yu Chen, Li-Gang Lin

National Chiao Tung University, Hsinchu, Taiwan

14:40 – 15:00 Smart Phone-based Fuzzy Modeling to Examine Facial Skin Quality

Yo-Ping Huang, Yan-Zong Li, Chien-Chou Lin

National Taipei University of Technology, Taipei, Taiwan

15:00 – 15:20 Admissibility of Fuzzy Support Vector Machine through Loss Function

Chan-Yun Yang*, Gene Eu Jan**, Kuo-Ho Su***

, * National Taipei University, New Taipei City, Taiwan

***** Chinese Culture University, Taipei, Taiwan

15:20 – 15:40 Fuzzy Regulation of DC-Bus Voltage for Solar Energy System

Gwo-Ruey Yu, Jian-Fu Chen

National Chung Cheng University, Chiayi, Taiwan

14:20 – 15:40 [TP1] POSTER SESSION

Embedded 8-bit AES in Wireless Bluetooth Application

Chi-Wu Huang, Shao-Wei Kuo, Chi-Jeng Chang

National Taiwan Normal University, Taipei, Taiwan

Employing 2DoF PID Controllers to Improve Greenhouse Climate System Robustness

Eugen Horatiu Gurban, Gheorghe-Daniel Andreescu

"Politehnica" University of Timișoara, Timișoara, Romania

15:40 – 16:00 COFFEE BREAK

16:00 – 17:40 PARALLEL SESSIONS

16:00 – 17:40 [T2a] SESSION on Optimization Room F09

Session Chair: *Nicola Pio Belfiore*

16:00 – 16:20 A Petri Nets and Genetic Algorithm-based Optimal Scheduling for Job Shop Manufacturing Systems

Albert W. L. Yao, Y. M. Pan

National Kaohsiung First University of Science and Technology, Taiwan, R.O.C.

16:20 – 16:40 Design, Optimization and Construction of MEMS-based Micro Grippers for Cell Manipulation

Nicola Pio Belfiore, Matteo Verotti, Rocco Crescenzi and Marco Balucani

Sapienza University of Rome, Rome, Italy

- 16:40 – 17:00 **Parallel Genetic Algorithm for Periodic Vehicle Routing and Scheduling Problem**
P. Kurdel and J. Sebestyénová
 Institute of Informatics, Slovak Academy of Sciences, Bratislava, Slovakia
- 17:00 – 17:20 **Trajectory Optimization and Optimal Control of Vehicle Dynamics under Critically Stable Driving Conditions**
Shaady Khatab, Ansgar Traechtler
 Heinz Nixdorf Institute, Paderborn, Germany
- 17:20 – 17:40 **Traffic Condition Monitoring using Complex Event Processing**
Bogdan Târnaucă
 Siemens Corporate Technology Romania, and Transilvania University of Braşov
Dan Puiu, Dragoş Damian
 Siemens Corporate Technology Romania
Vasile Comnac
 Transilvania University of Brasov
- 16:00 – 17:40 **[T2b] SESSION on Image Processing System** _____ **Room F08**
- Session Chair: **Cheng-Yuan Chang**
- 16:00 – 16:20 **Vision-based Controller Design with the Application to a 3D Overhead Crane System**
Lun-Hui Lee^{*}, Chung-Hao Huang^{*}, Sung-Chih Ku^{} and Cheng-Yuan Chang^{**}**
^{*} Institute of Nuclear Energy Research in Taiwan, Taiwan
^{**} Chung Yuan Christian University, Taiwan
- 16:20 – 16:40 **Marker Localization with a Multi-Camera System**
Dávid Szalóki, Norbert Koszó, Kristóf Csorba, Gábor Tevesz
 Budapest University of Technology and Economics, Budapest, Hungary
- 16:40 – 17:00 **Realization of Affine SIFT Real-Time Image Processing for Home Service Robot**
Ying-Hao Wang, Hao-En Cheng, Chih-Jui Lin, Ri-Wei Deng, Hsuan Lee, Tzuu-Hseng S. Li
 National Cheng Kung University, Tainan, Taiwan, R.O.C.
- 17:00 – 17:20 **Road Area Detection based on Image Segmentation and Contour Feature**
Chun-Wen Hung, Chih-Li Huo, Yu-Hsiang Yu, Tsung-Ying Sun
 National Dong Hwa University, Hualien, Taiwan, R.O.C.
- 17:20 – 17:40 **Applying Weighted Mean Aggregation to Edge Detection of Images**
Jyh-Yeong Chang, Yi-Hsin Chang
 National Chiao Tung University, Hsinchu, Taiwan
- 16:00 – 17:40 **[T2c] SESSION on Intelligent Control** _____ **Room F07**
- Session Chair: **Shyh-Feng Chen**
- 16:00 – 16:20 **An Instrument-based Testing Platform and Fuel Control Algorithm Verification for Direct Methanol Fuel Cell**
Sheng-Hua Chen^{*}, Ya-Chien Chung^{}, Tzyy-Yih Yang^{**}, Yu-Jen Chiu^{**}, Jin-Yih Lin^{**}, Chen-Tung Chi^{**}**
^{*} Ship and Ocean Industries R&D Center, New Taipei City, Taiwan
^{**} Taipei Chengshih University of Science and Technology, Taipei City, Taiwan
- 16:20 – 16:40 **Control Theoretic Properties of Physiological Controller Motifs**
Kristian Thorsen, Peter Ruoff, Tormod Drengstig
 University of Stavanger, Norway
- 16:40 – 17:00 **Tower Crane Sway Control with Inclinometer Feedback and Dual Loop Control Structure**
Chwan-Hsen Chen

Yuan Ze University, Chung Li City, Taiwan

17:00 – 17:20 **State Feedback Controller Design for Discrete-Time Singular Systems with Random Packet Losses**

Shyh-Feng Chen

China University of Science and Technology, Taipei, Taiwan, R.O.C.

17:20 – 17:40 **Novel Conditions for Finite Time Stability of Discrete Time Delay Systems**

*D. Lj. Debeljkovic**, *I. M. Buzurovic***, *S. B. Stojanovic****, *A. M. Jovanovic**

* University of Belgrade, Belgrade, Serbia

** Harvard University, Boston, MA, USA

*** University of Nis, Leskovac, Serbia

16:00 – 17:40 **[TP2] POSTER SESSION** _____

Analysis of Synthetic Metabolic Pathways Solution Space

Jurij Meitalovs, Egils Stalidzans

Latvia University of Agriculture, Latvia

Hybrid Multiple-Object Tracker Incorporating Particle Swarm Optimization and Particle Filter

Chen-Chien Hsu, Yung-Ching Chu

National Taiwan Normal University, Taipei, Taiwan

Ming-Chih Lu

St. John's University, Taipei, Taiwan

18:15 **BUS DEPARTURE** _____ from Óbuda University

19:00 – 22:00 **BANQUET** _____ Danube cruise

July 5, Friday

8:30 – 16:00 **REGISTRATION** _____

9:00 – 10:20 **PARALLEL SESSIONS** _____

9:00 – 10:20 **[F1a] SESSION on Image Processing and Robot System II** _____ Room F09

Session Chair: *Wei-Yen Wang*

9:00 – 9:20 **Design and Implementation of Adaptive Dynamic Controllers for Wheeled Mobile Robots**

*Yi-Feng Kao**, *Yi-Hsing Chien**, *I-Hsum Li***, *Wei-Yen Wang**, *Tsu-Tian Lee****

* National Taiwan Normal University, Taipei, Taiwan, R.O.C.

** Lee-Ming Institute of Technology, Taipei, Taiwan, R.O.C.

*** Chung Yuan Christian University, Taoyuan, Taiwan, R.O.C.

9:20 – 9:40 **Autonomous Stair Detection and Climbing Systems for a Tracked Robot**

*Chien-Kai Tseng**, *I-Hsum Li***, *Yi-Hsing Chien**, *Ming-Chang Chen****, *Wei-Yen Wang**

* National Taiwan Normal University, Taipei, Taiwan, R.O.C.

** Lee-Ming Institute of Technology, Taipei, Taiwan, R.O.C.

*** National Taiwan University of Science and Technology, Taipei, Taiwan, R.O.C.

9:40 – 10:00 **Image-based Obstacle Avoidance and Path-Planning System**

*Yi-Han Chen**, *Ming-Chang Chen***, *I-Hsum Li****, *Wei-Yen Wang**, *Shun-Feng Su***

* National Taiwan Normal University, Taipei, Taiwan, R.O.C.

** National Taiwan University of Science and Technology, Taipei, Taiwan, R.O.C.

*** Lee-Ming Institute of Technology, Taipei, Taiwan, R.O.C.

10:00 – 10:20 **Educational Robots as Collaborative Learning Objects for Teaching Computer Science**

R. Burbaite, V. Stuikys, R. Damasevicius
Kaunas University of Technology, Kaunas, Lithuania

9:00 – 10:20 **[F1b] SESSION on Intelligent Robot System** _____ **Room F08**

Session Chair: *Ching-Chih Tsai*

9:00 – 9:20 **Target Object Announcement by Synchronous Blinking of a Robot and an Object**

Mitsuharu Matsumoto, Sayako Hata
The University of Electro-Communications, Japan

9:20 – 9:40 **Study on Constructing Forensic Procedure of Digital Evidence on Smart Handheld Device**

Chih-Pai Chang, Chun-Te Chen*, Tsung-Hui Lu*, I-Long Lin**, Po Huang***, Hua-Shyun Lu*****
* Huafan University, Taipei, R.O.C.
** Yuanpei University, HsinChu, R.O.C.
*** iForensics Digital Inc., Taipei, R.O.C
**** Kang-Ning Junior College of Medical Care and Management, Taipei City, R.O.C.

9:40 – 10:00 **Adaptive Robust Motion Control Using Fuzzy Wavelet Neural Networks for Uncertain Electric Two-Wheeled Robotic Vehicles**

Ching-Chih Tsai, Ching-Hang Tsai

10:00 – 10:20 **Design and Implementation of a 4WS4WD Mobile Robot and Its Control Applications**

Chih-Jui Lin, Su-Ming Hsiao, Ying-Hao Wang, Cheng-Hao Yeh, Chien-Feng Huang, Tzuu-Hseng S. Li
National Cheng Kung University, Tainan, Taiwan, ROC

9:00 – 10:20 **[F1c] SESSION on Neural Networks** _____ **Room F07**

Session Chair: *Michal Rojček*

9:00 – 9:20 **Classification of Slovak Municipalities by Neural Networks with Regard to the Degree of Digital Literacy Index**

Alžbeta Michalíková, Soňa Volentierová
Matej Bel University, Banská Bystrica, Slovakia

9:20 – 9:40 **Decentralized Adaptive Control Using an Affine plus Self-organizing Fuzzy Neural Network for Multi-Agent System Consensus Problem**

Masanao Obayashi, Yasuhiro Otomi*, Takashi Kuremoto*, Kunikazu Kobayashi**, Shingo Mabu**
* Yamaguchi University, Ube, Yamaguchi, Japan
** Aichi Prefectural University, Nagakute, Aichi, Japan

9:40 – 10:00 **Clustering of Text Collections based on PART Neural Network and Similarity Measure**

R. Krakovsky and I. Mokris***
* Catholic University, Ruzomberok, Slovakia
** Institute of Informatics, Slovak Academy of Sciences, Bratislava, Slovakia

10:00 – 10:20 **System for Document Clustering from mixed Sources based on Fuzzy ART Neural Network**

Michal Rojček, Igor Mokriš***
* Catholic University in Ružomberok, Ružomberok, Slovakia
** Institute of Informatics, Slovak Academy of Sciences, Bratislava, Slovakia

9:00 – 10:20 **[FP1] POSTER SESSION** _____

Robust Tracking Controller Design and Its Application to Wheeled Robot

Kuo-Ho Su, Minh-Hoang To*, Chan-Yun Yang***
* Chinese Culture University, Taipei, Taiwan
** National Taipei University, New Taipei City, Taiwan

A Computer Vision System for Fast AR Film Thickness Measurement of Polysilicon Solar Cells

Hsu-Nan Yen, Hsi-Ting Hou***

* St. John's University, New Taipei City, Taiwan, R.O.C.
** Tamkang University, New Taipei City, Taiwan, R.O.C.

10:20 – 10:40 **COFFEE BREAK** _____

10:40 – 12:00 **PARALLEL SESSIONS** _____

10:40 – 12:00 **[F2a] SESSION on Machine Vision and Map Building** _____ **Room F09**

Session Chair: *Chen-Chien Hsu*

10:40 – 11:00 **Machine-Vision-based Obstacle Avoidance System for Robot System**

*Cheng-Pei Tsai**, *Chin-Tun Chuang***, *Ming-Chih Lu***, *Wei-Yen Wang****, *Shun-Feng Su**, *Shyang-Lih Chang***

* NTUST, Taipei City, Taiwan

** St. John's University, New Taipei City, Taiwan

*** NTNU, Taipei City, Taiwan

11:00 – 11:20 **Map Building of Unknown Environment Using PSO-tuned Enhanced Iterative Closest Point Algorithm**

Chen-Chien Hsu, *Hua-En Chang*

National Taiwan Normal University, Taipei, Taiwan

Yin-Yu Lu

University of Melbourne, Melbourne, Australia

11:20 – 11:40 **High Speed Gaze Tracking with Visible Light**

Wen-Chung Kao, *Wei-Te Chang*, *Sheng-Ju Wu*, *Chien-Hui Liu*, *Shih-Yao Yin*

National Taiwan Normal University, Taipei, Taiwan

11:40 – 12:00 **Time Sequence-based Lane-Marking Identification**

Jiun-Hung Li, *Chih-Li Huo*, *Yu-Hsiang Yu*, *Tsung-Ying Sun*

National Dong Hwa University, Hualien, Taiwan, R.O.C

10:40 – 11:40 **[F2b] SESSION on Intelligent Data Analysis and Applications** _____ **Room F08**

Session Chair: *Kao-Shing Hwang*

10:40 – 11:00 **Reinforcement Learning with Model Sharing for Multi-Agent Systems**

*Kao-Shing Hwang**, *Wei-Cheng Jiang***, *Yu-Jen Chen***, *Wei-Han Wang****

* National Sun Yat-sen University, Kaohsiung, Taiwan, R.O.C.

** National Chung Cheng University, Chiayi, Taiwan, R.O.C.

*** Precision Machinery Research & Development Center, Taichung, Taiwan, R.O.C.

11:00 – 11:20 **Possibilistic c-Regression Models Clustering Algorithm**

*Chung-Chun Kung**, *Hong-Chi Ku** and *Jui-Yiao Su***

* Tatung University, Taipei, Taiwan, R.O.C.

* Industrial Technology Research Institute (ITRI), Hsinchu, Taiwan, R.O.C.

11:20 – 11:40 **Modelling and Analysing Defence-in-Depth in Arming Systems**

Dan Slipper and *Alistair A. McEwan*

University of Leicester, Leicester, UK

Wilson Ifill

AWE Aldermaston, Berkshire, UK

10:40 – 11:40 **[F2c] SPECIAL SESSION on Emerging PhD Research in Applied System Science and Informatics** _____ **Room F07**

The session was organized by the Doctoral School of Applied Informatics, Óbuda University, Budapest, Hungary

Session Chair: **László Horváth**

10:40 – 11:10 **About Performance Requirements Set against Consumer-Grade Geolocation Technologies**

Ferenc Brachmann

University of Pécs, Pécs, Hungary

11:00 – 11:20 **Quantum Structure Classification by Kohonen Self-Organizing Map and by Fuzzy C-Means Algorithm**

Antal Ürmös*, **Márk Farkas****, **László T. Kóczy*****, **Ákos Nemcsics***

* Óbuda University, Budapest, Hungary

** Nexogen Ltd., Budapest, Hungary

*** Széchenyi István University, Győr, Hungary

11:20 – 11:40 **PID Controller Parameter Estimator Using Ant Colony System**

Hung-Ching Lu*, **Hsi-Kuang Liu****, **Lian-Fue Yang*****

*, ** Tatung University, Tatung University, Taipei, Taiwan

, * Taipei College of Maritime Technology, Taipei, Taiwan

10:40 – 12:00 **[FP2] POSTER SESSION**

Monitoring of Processes in Component Joints by Intelligent System

Zuzana Murčínková*, **Jaromír Murčínko****

* Technical University in Košice with seat in Prešov, Slovak Republic

** DELTA FIT, Slovak Republic

12:00 – 13:20 **LUNCH**

13:20 – 15:20 **PARALLEL SESSIONS**

13:20 – 15:20 **[F3a] SESSION on Intelligent Systems and Applications I**

 Room F09

Session Chair: **Germano Resconi**

13:20 – 13:40 **Mobile Performance Metrics for Resource Management**

Krisztián Pándi, **Hassan Charaf**

Budapest University of Technology and Economics, Budapest, Hungary

13:40 – 14:00 **The Solution Area-based Approach of the Content-Driven Template-Based Layout System**

István Albert, **Sándor Kolumbán**, **Hassan Charaf**, **László Lengyel**

Budapest University of Technology and Economics, Budapest, Hungary

14:00 – 14:20 **Inside the Ticketing System and the Benefits Brought by It**

Patrick Stefanescu, **Marian Mocan**, **Werner Stefanescu**

University "Politehnica" of Timișoara, Timișoara, Romania

14:20 – 14:40 **Condition Monitoring of Transformer Bushings Using Rough Sets, Principal Component Analysis and Granular Computation as Preprocessors**

JT Maumela*, **FV Nelwamondo*#**, **T Marwala***

* University of Johannesburg, Auckland Park, South Africa

Council of Scientific and Industrial Research, Pretoria, South Africa

14:40 – 15:00 **Model Choice for Binned-EM Algorithms of Fourteen Parsimonious Gaussian Mixture Models by BIC and ICL Criteria**

Jingwen Wu, **Hani Hamdan**

SUPELEC, France

15:00 – 15:20 **Morphogenetic Evolution**
Germano Resconi
Catholic University, Brescia, Italy

13:20 – 15:20 **[F3b] SESSION on System of Systems** _____ **Room F08**

Session Chair: *Gyula Hermann*

13:20 – 13:40 **Systems of Systems Engineering: A Research Imperative**
*Michael Henshaw**, *Carys Siemieniuch**, *Murray Sinclair**, *Sharon Henson**, *Vishal Barot**, *Mo Jamshidi***, *Dan Delaurentis****, *Cornelius Ncube*****, *Soo Ling Lim*****, and *Huseyin Dogan*****

* Loughborough University, Loughborough, UK

** University of Texas, San Antonio, US

*** Purdue University, West Lafayette, US

**** Bournemouth University, Dorset, UK

13:40 – 14:00 **The Implementation of ASG and SG Random Number Generators**

Esra Erkek, Taner Tuncer

Firat University, Elazig, Turkey

14:00 – 14:20 **A Novel Algorithm for Flattening Virtual Subsystems in Simulink Models**

Péter Fehér, Tamás Mészáros and László Lengyel

Budapest University of Technology and Economics, Budapest, Hungary

Pieter J. Mosterman

Research and Development, MathWorks, Natick, MA, USA

14:20 – 14:40 **Stabilizing Switching Laws for Switched LPV Systems with All Unstable Subsystems**

*Xu He**, *Gyorgyi Dymirkovsky***

* Chinese Academy of Sciences, Shenyang, Liaoning, P.R. China

** Dogus University, Istanbul, R. Turkey

14:40 – 15:00 **LPV Systems with Unstable Subsystems: A Single Lyapunov Function Solution to Stabilizing Switching Laws**

*Xu He**, *Gyorgyi Dymirkovsky***

* Chinese Academy of Sciences, Shenyang, Liaoning, P.R. China

** Dogus University, Istanbul, R. Turkey

15:00 – 15:20 **Reengineering Urban Metabolism: Simulation and Control of Allied Biomakeries**

István Kenyeres

BIOPOLUS Institute, Budapest, Hungary

13:20 – 15:20 **[FP3] POSTER SESSION** _____

Binary Decision Diagram Optimization Method Based on Multiplexer Reduction Methods

Marián Maruniak, Peter Pišteň

Slovak University of Technology in Bratislava, Bratislava, Slovakia

15:20 – 15:40 **COFFEE BREAK** _____

15:40 – 17:20 **PARALLEL SESSIONS** _____

15:40 – 17:20 **[F4a] SESSION on Intelligent Systems and Applications II** _____ **Room F09**

Session Chair: *Tsung-Ying Sun*

- 15:40 – 16:00 **Study on Constructing Malware Attack Forensic Procedure of Digital Evidence**
Chih-Pai Chang**, *Chun-Te Chen**, *Tsung-Hui Lu**, *I-Long Lin, *Jesse Chang****, *Chen-Cheng Lin****
 * Huafan University, Taipei, R.O.C.
 ** Yuanpei University, HsinChu, R.O.C.
 *** Acro Technology Company, Taipei, R.O.C
- 16:00 – 16:20 **An Effective Teeth Segmentation Method for Dental Periapical Radiographs Based on Local Singularity**
P. L. Lin**, *P. Y. Huang, *P. W. Huang*****
 * Providence University, Shalu, Taichung, Taiwan
 ** National Chung Hsing University, Taichung, Taiwan
- 16:20 – 16:40 **A Novel Calibration Method based on Heuristic B-spline Model for Fish-Eye Lenses**
Jie-Shou Lu*, *Chih-Li Huo*, *Yu-Hsiang Yu*, *Tsung-Ying Sun
 National Dong Hwa University, Hualien, Taiwan
- 16:40 – 17:00 **A Case Study on Privacy Information Protection in Campus**
Tsung-Hui Lu*, *Zne-Jung Lee
 Huafan University, New Taipei City, Taiwan
- 17:00 – 17:20 **Applying Rough Set Theory to Establish the Knowledge Base of Ammunition Management**
Hua-Kai Chiou**, *Yong-Ting Huang, *Mei-Chun Mao****
 * China University of Science and Technology, Taipei, Taiwan
 ** National Defense University, Taipei, Taiwan

15:40 – 17:20 [F4b] SESSION on Intelligent Power and Energy Systems _____ Room F08

Session Chair: ***Yao-Ching Hsieh***

- 15:40 – 16:00 **Methods to Compare Coalition's Prevention Power Derived from Effectivity for Social Choice Correspondence**
Kentaro Kojima
 Aoyama Gakuin University, Kanagawa, Japan
- 16:00 – 16:20 **Global Efficiency of an UPS Module Integrated with PV, H2, and CAES Systems**
Nicola Pio Belfiore*, *Matteo Verotti*, *Silvia Sangiorgio* and *Luca Rubini
 Sapienza University of Rome, Rome, Italy
- 16:20 – 16:40 **Battery Power System with Arrayed Battery Power Modules**
Chin-Sien Moo**, *Jhen-Yu Jian**, *Tsung-Hsi Wu**, *Li-Ren Yu**, *Chih-Chiang Hua**
 * National Sun Yat-sen University, Kaohsiung, Taiwan
 ** National Yunlin University of Science & Technology, Yunlin, Taiwan
- 16:40 – 17:00 **Operation of Battery Power Modules with Bidirectional DC/DC Converters**
Tsung-Hsi Wu**, *Chin-Sien Moo**, *Yao-Ching Hsieh, and *Chun-Ying Juan******
 * National Sun Yat-sen University, Kaohsiung City, Taiwan
 ** National Dong Hwa University, Hualien City, Taiwan
 *** MIRDC Metal Industries, Taipei City, Taiwan
- 17:00 – 17:20 **Balanced Discharging for Serial Battery Power Modules with Boost Converters**
Li-Ren Yu**, *Yao-Ching Hsieh, *Wei-Chen Liu**, *Chin-Sien Moo****
 * National Sun Yat-sen University, Kaohsiung City, Taiwan
 ** National Dong Hwa University, Hualien City, Taiwan

15:40 – 17:20 [FP4] POSTER SESSION _____

- Analysis and Design of a Single-Switch HPF AC/DC Converter for Driving Power LEDs**
Hung-Liang Cheng**, *Yong-Nong Chang, *Chun-An Cheng** and *Chao-Shun Chen****
 * I-Shou University, Kaohsiung, Taiwan, R.O.C.

** National Formosa University, Yunlin County, Taiwan, R.O.C.

17:20 **Closing Ceremony and Invitation to ICSSE 2014 Room F09**

18:00 **Gala Dinner _____ NIK Aula**

Same building, wing 'NIK', first floor