2015 International Conference on Smart Sensors and Application (ICSSA 2015)

Kuala Lumpur, Malaysia
26 – 28 May 2015
ICSSA 2015 Program Schedule
Program in Chronological Order

Tuesday, 26 May 2015

Session 1: Chemical, Biological, Optical, and Magnetic Sensors
12:00 - 13:00 Avenue 9

12:00-12:15
Cytoxicity Studies of Lung Cancer Cells Using Impedance Biosensor
Ahmad Fairuzabadi Mansor, Anis Nurashikin Nordin, Irmanisha Ibrahim
(International Islamic University Malaysia, MALAYSIA)

12:15-12:30
Classification of Pure and Mixture Agarwood oils by Electronic Nose and Discriminant Factorial Analysis (DFA)
Sahrim Lias, Nor Azah Mohamad Ali, Mailina Jamil, Muhd Hafizi Zainal and Siti Humeirah Ab Ghani (Forest Research Institute Malaysia (FRIM), MALAYSIA)

12:30-12:45
Optimization on the Preparation of Microfluidic Channel Using Dry Film Resist

12:45-13:00
Numerical Analysis on DNA-Sensor Based on Copper-Graphene Surface Plasmon Resonance
Hamid Toloue A. T., Anthony Centeno (Universiti Teknologi Malaysia, MALAYSIA)

Session 2: System Identification, Modeling and Simulation
14:15 - 15:30 Avenue 9

14:15-14:30
Gas turbine bearing and vibration classification of using multi-layer neural network
Moneer Ali Lilo, Latiff, L.A, Aminudin Bin Haji Abu, Abidulkarim K. Ililjan (Universiti Teknologi Malaysia, MALAYSIA), Yousif I. Al Mashhadany, (University of Anbar, IRAQ)

14:30-14:45
Cubature Quadrature Kalman Filter for Maneuvering Target Tracking Physical
C. Abhinoy Kumar Singh and Shovan Bhaumik (Indian Institute of Technology Patna, Bihar, INDIA)

14:45-15:00
Optimal Analysis and Control of 2D Nonlinear Gantry Crane System
Ahmad Bala Alhassan, Kumaresan A. Danapalasingam, Bashir Bala Muhammad, Yahaya Md Sam (Universiti Teknologi Malaysia, MALAYSIA)

15:00-15:15
Simplified Parameter-Transformation for Guaranteeing Variable-Filter Stability
Tian-Bo Deng (Toho University, JAPAN)

15:15-15:30
Time Delay Estimation between two Biosignals using System Identification
Awa Zuhair Sameen, Edmond Zahedi (University Kebangsaan Malaysia, MALAYSIA)

Session 3: Wireless Sensors Measurement Systems
16:00 - 17:30 Avenue 9
16:00 - 16:15  
**Statistical Validation of Performance of ZigBee-based Wireless Sensor Network for Track Cycling**  
Rosdiadee Nordin, Mahamod Ismail (Universiti Kebangsaan Malaysia, MALAYSIA) Sadik Kamil Sharghan (College of Electrical and Electronic Techniques, Baghdad, IRAQ)

16:15-16:30  
**Adaptive-PCA: An Event-Based Data Aggregation Using Principal Component Analysis for WSNs**  
Patcharapol Poeskaew, Paskom Champrasert (Chiang Mai University, Chiang Mai, THAILAND)

16:30-16:45  
**Enhanced Trust Aware Routing against Wormhole Attacks in Wireless Sensor Networks**  
Raja Waseem Anwar, Majid Bakhtiar, Anazida Zainal, Abdul Hanan Abdullah and Kashif Naseer Qureshi (Universiti Teknologi Malaysia, MALAYSIA)

16:45-17:00  
**Concept Development of Integrated Monitoring System Model to Support Activities Monitoring in the Border Region**  
P. Daud, O. Heriana, A. N. Rahman, E. J. Pristianto, D. Mahmudin, Y. N. Wijayanto, N. Armi and D. Syamsi (Indonesian Institute of Sciences (LIPI), INDONESIA)

17:00 - 17:15  
**Optimal Design Of Wireless Sensor Network For Providing QOS**  
Sathyaparakash Palaniappan (Mahabharathi Engineering College, Chinnasalem, INDIA), P. Prakasam (United Institute of Technology, Comatorare, INDIA), Jayakumar Vaiithiyashankar, Dr. Shoheli Sayeed (Multimedia University, MALAYSIA)

17:15 - 17:30  
**Precision Irrigation using Wireless Sensor Network**  
Ahmad Nizar Harun, Mohamed Rawidean Mohd Kassim, Ibrahim Mat, Siti Sarah Ramli (MIMOS, MALAYSIA)

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**Keynote Speaker 1**  
09:30 - 10:30  
**5G A Special Generation (SG)**  
Prof. Dr. Rahim Tafazolli (University of Surrey, UNITED KINGDOM)

**Keynote Speaker 2**  
11:00 - 12:00  
**Ultrasonic Tomography system for Liquid/Gas bubble Column**  
Prof Ir Dr Ruzairi Abdul Rahim (Universiti Teknologi Malaysia, MALAYSIA)

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**Wednesday, 27 May 2015**

**Session 4: Smart Sensors and Transducers**  
09:00 - 10:45  
**Investigating the Optimum Frequency and Gain for Calibration Copper Block Using Eddy Current Technique**  
Damhuji Rifai, Ahmed N. Abdalla, Ramdan Razali (Universiti Malaysia Pahang, MALAYSIA)

09:15 - 09:30  
**SSNM-Smart Sensor Network Model for Vehicular Ad hoc Networks**  
Kashif Naseer Qureshi, Abdul Hanan Abdullah, Majid Bukhari and Raja Waseem Anwar (Universiti Teknologi Malaysia, MALAYSIA)

09:30 - 09:45  
**Environmental Liquid Waste Sensors Using Polymer Multi-Coupled Ring Resonators**  
D. Mahmudin, T. T. Estu, P. Daud, N. Armi, and G. Wirantoe (Indonesian Institute of Sciences (LIPI), INDONESIA), Y. N. Wijayanto (Nat. Ins. Information and Communications Technology, JAPAN)

09:45 - 10:00  
**Plant Growth Optimization Work Using Variable Intensity Method and Far Red Treatment for Brassica Chinensis in Indoor Farming**  
Ahmad Nizar Harun, Robiah Ahmad, Norliza Mohamed (Universiti Teknologi Malaysia, MALAYSIA)
10:00 - 10:15 Drift Compensation using Bulk Feedback in a Neural Recording System based on Open-Gate FET
Ashwin K. Vijayan, Sreejish Sreenivasan, Deleep R. Nair and M. Ramasubba Reddy (IIT Madras, Chennai, INDIA)

10:15 - 10:30 Power transformer oil-level measurement using multiple fiber optic sensors
Deba Kumar Mahanta (Assam Engineering College, Assam, INDIA), Shakuntala Laskar (DBCET-Assam Don Bosco University, Assam, INDIA)

10:30 - 10:45 Simulation and Analysis of Actuation Voltage of Electrostatically Actuated RF MEMS Cantilever Switch
Norshahida Saba (MARA Japan Industrial Institute, MALAYSIA), Norhayati Soin (University of Malaya, MALAYSIA), Khairun Nisa Khamil (University of Technical Malaysia Melaka, MALAYSIA)

Session 5: Robotic and Process Automation
12:15 - 12:45 Integrated Online Water Quality Monitoring
Goib Wiranto, Yudi Yuliyus Masulana, I Dewa Putu Hermida, Iqbal Syamsu, Dadin Mahmudin (Indonesian Institute of Sciences (LIPI), INDONESIA)

12:30 - 12:45 A Human Orientation Tracking System using Template Matching and Active Infrared Marker
Mark Tee Kit Tsun, Lau Bee Cheng, Hudyjaya Siswoyo Jo (Swinburne University of Technology Kuching, MALAYSIA), Sian Lun Lau (Sunway University Selangor, MALAYSIA)

Session 6: Software Development, Evolutionary Computation and Optimization 14:15 - 15:45
14:15 - 14:30 An Analysis of MVL Neural Operators Using Feed Forward Backpropagation: Realization and Application of Logic Synthesis
Atharbab Chowdhury, Md. Saifullah Razali, Gary Loh Chee Wyai, Lenin Gopal, Bakri Madon (University College of Technology Sarawak, MALAYSIA), Lenin Gopal (Curtin University Sarawak, MALAYSIA), Ashutosh Kumar Singh (National Institute of Technology, Kurukshetra, INDIA)

14:30 - 14:45 A Fuzzy based Low-Cost Monitoring Module built with Raspberry Pi-Python-Java Architecture
Fahim Salauddin, Tarif Ryad Rahman (North South University Dhaka, BANGLADESH)

14:45 - 15:00 Feature Points Selection for Markerless Hand Pose Estimation
Malik Arman Morshidi (International Islamic University Malaysia MALAYSIA), Tardi Tjahjadi (University of Warwick Coventry, UNITED KINGDOM)

15:00 - 15:15 Quad Flat No-Lead (QFN) Device Faulty Detection Using Gabor Wavelets
Tay Wai Lun, Norashikin Yahya (Universiti Teknologi Petronas, MALAYSIA)

15:15 - 15:30 Optimization of multilayer micro channels heat sinks cooling system using genetic algorithm
Husain Zaidan, Normah Mohd Ghazali, Robiah Ahmad (Universiti Teknologi Malaysia, MALAYSIA)

15:30 - 15:45 Flowchart-based Bayesian Intelligent Tutoring System for Computer Programming
Danial Hooshyar, Rodina Binti Ahmad, Mosin Fathi (University of Malaya, MALAYSIA), Moslem Yousefi (College of Engineering, Universiti Tenaga Nasional, MALAYSIA), Maral Hooshyar (Islamic Azad University Nour Branch, IRAN)

Session 7: Environment and Health Monitoring
16:15 - 17:00 A Temperature Monitoring System Incorporating an Array of Precision
Wireless Thermometers
Amir Javadpour, Hamidreza Memarzadeh-Tehran, Fatemeh Saghafi, (University of Tehran, IRAN)

16:30 - 16:45 Day2 S7.2
Effect of LED Lights, Plant Growth Regulator and Photoperiod on Shoot Production of in vitro Propagated Rosa spp
Nurul Syahirah Azmi, Robiah Ahmad (Universiti Teknologi Malaysia, MALAYSIA), Rusli Ibrahim (Agriculture and Biotechnology Division Nuclear Agency Malaysia, MALAYSIA)

16:45 - 17:00 Day2 S7.3
Respiratory Rate (RR) Based Analysis of PPG Signal for Different Physiological Conditions
Syed Absar Kazmi, Mansoor Hussain Shah, Sheroz Khan and Othman O. Khalifa (International Islamic University Malaysia, MALAYSIA)

Keynote Speaker 3
11:15 - 12:15 Avenue 9

Keynote Speaker 3: 11:15-12:15 Day2 INVS.3
Sensing with Field Effect Devices
Prof. Dr. Arezki Benfdila (University M. Mammeri, ALGERIA)

Thursday, 28 May 2015

Tutorial Session (If Any)