

## ***PROGRAMS***

### **Day 1: May 21, 2010**

---

5.00 pm – 7.00 pm	Conference registration @ Ground Floor or 1 <sup>st</sup> Floor & Hotel Check In
8.00 pm – 11.00 pm	Dinner @ Café Mahkota

---

### **Day 2: May 22, 2010**

---

7.30 am – 8.00 am	Breakfast @ Café Mahkota
8.30 am – 10.30 am	Parallel Session A1, B1
10.30 am – 10.45 am	Tea Break @ Foyer
10.45 am – 12.45 pm	Parallel Session A2, B2
12.45 pm – 2.15 pm	Lunch @ Café Mahkota
2.15 pm – 4.00 pm	Parallel Session A3, B3
4.00 pm – 4.15 pm	Tea Break @ Foyer
4.15 pm – 5.45 pm	Parallel Session A4, B4
8.00 pm – 10.00 pm	CSPA2010 Gala Dinner & Welcoming Speech @ Mahkota Ballroom (1 <sup>st</sup> Floor)

---

### **Day 3: May 23, 2010**

---

7.30 am – 8.30 am	Breakfast @ Café Mahkota
8.30 am – 11.00 am	Parallel Session A5, B5
11.00 am – 11.15 am	Tea Break @ Foyer
11.15 am – 12.00 pm	Best Paper Award Ceremony, Closing Ceremony & Group Photo @
12.00 pm – 2.00 pm	Lunch @ Café Mahkota & Check-out

---

**Technical Session A1 – Saturday, 22<sup>nd</sup> MAY 2010**

**Time: 8.30 am – 10.30 am**

**Venue: Tiara 3, 4 (1<sup>st</sup> Floor)**

---

- 8.30 am – 8.45 am     A1.01 ID#25  
**Detection of Road Rutting Using Video and Image Processing**  
Maher I. Rajab & Mohammed A. Saif
- 8.45 am – 9.00 am     A1.02 ID#126  
**Simulation on using Cross-Correlation Technique for Two-Phase Liquid-Gas Flow for Ultrasonic Transmission Tomography**  
Nor Muzakkir Nor Ayob; Mohd Hafiz Fazalul Rahiman; Zulkarnay Zakaria; Sazali Yaacob; & Ruzairi Abdul Rahim
- 9.00 am – 9.15 am     A1.03 ID#45  
**A Phoneme Based Sign Language Recognition System Using Skin Color Segmentation**  
Rajkumar Palaniappan & Sazali yaacob
- 9.15 am – 9.30 am     A1.04 ID#61  
**Modelling of Initial Reference Frame for Basic Background Subtraction Techniques**  
Farah Yasmin Abdul Rahman; Aini Hussain; Nooritawati Md Tahir; Wan Mimi Diyana Wan Zaki; Mohd Marzuki Mustafa
- 9.30 am – 9.45 am     A1.05 ID#112  
**Evaluation of Human Stress Using EEG Power Spectrum**  
Noor Hayatee Abdul Hamid; Norizam Sulaiman; Siti Armiza Mohd Aris; Zunairah Haji Murat & Mohd Nasir Taib
- 9.45 am – 10.00 am     A1.06 ID#71  
**Introducing SKIP Mode In Pixel Domain Distributed Video Coding**  
Abdelrahman Elamin
- 10.00 am – 10.15 am     A1.07 ID#77  
**Face Recognition using Independent Component Analysis of GaborJet (GaborJet-ICA)**  
Kishor Kinage; & S G Bhirud
- 10.15 am – 10.30 am     A1.08 ID#129  
**Myocardial Motion Analysis Using Optical Flow and Wavelet Decomposition**  
Adhi Harmoko Saputro; Mohd. Marzuki Mustafa; Aini Hussain; Oteh Maskon; & Ika Faizura Mohd Noh
-

**Technical Session A2 – Saturday, 22<sup>nd</sup> MAY 2010**

**Time: 10.45 am – 12.45 pm**

**Venue: Tiara 3, 4 (1<sup>st</sup> Floor)**

---

10.45 am – 11.00 am	A2.01 ID#108 <b>Fuzzy Logic Controller for Glycerin Bleaching Temperature Control</b> Zakariah Yusuf; Zuriati Janin; & Mohd Nasir Taib
11.00 am – 11.15 am	A2.02 ID#17 <b>A Study on Electrode for Amperometric Measurement of Human Stress with Flow Injection Analysis Biosensing System</b> Yoot Khuan Lee; Muhamad Hurairah Adha Kamaruddin; Mohd Firdaus Abdullah; NinaKorlina Madzhi; & Anuar Ahmad
11.15 am – 11.30 am	A2.03 ID#124 <b>Ultrasonic Transducer Kit for Bacteria Growth Monitoring System</b> Aini Salwa Hasan Nudin; Kenneth Sundaraj; & Mohamed Zulkali Mohamed Daud
11.30 am – 11.45 am	A2.04 ID#118 <b>Detection of Facial Changes for Hospital ICU Patients</b> Naufal Mansor; Sazali Yaacob; Nagarajan Ramachandran; & Hariharan Muthusamy;
11.45 am – 12.00 pm	A2.05 ID#119 <b>Detection of Facial Changes for Hospital ICU Patients using Neural Network</b> Naufal Mansor; Sazali Yaacob; Nagarajan Ramachandran; & Hariharan Muthusamy
12.00 pm – 12.15 pm	A2.06 ID#100 <b>Cross Wigner Ville distribution of the Wireless Communication Channel</b> Zaiton Sharif; & Ahmad Zuri Sha'ameri
12.15 pm – 12.30 pm	A2.07 ID#121 <b>Real-Time Background Subtraction for Video Surveillance: From Research to Reality</b> Mohammad Hedayati; Wan Mimi Diyana Wan Zaki; & Aini Hussain
12.30 pm – 12.45 pm	A2.08 ID#111 <b>Self tuning PID Controller for Steam Distillation Essential Oil Extraction System</b> Nazurah Tajjudin; Zakariah Yusuf; Mohd Hezri Fazalul Rahiman; & Mohd Nasir Taib

---

**Technical Session A3 – Saturday, 22<sup>nd</sup> MAY 2010**

**Time: 2.15 pm – 4.00 pm**

**Venue: Tiara 3, 4 (1<sup>st</sup> Floor)**

---

2.15 pm – 2.30 pm	A3.01 ID#117 <b>Design and Development of Low Cost Biceps Tendonitis Monitoring System using EMG Sensor</b> Tarn Shi Poo; & Kenneth S Sundaraj
2.30 pm – 2.45 pm	A3.02 ID#128 <b>Analysis of PCA Based Feature Vectors for SVM Posture Classification</b> Shahrani Shahbudin; Aini Hussain; Hafizah Husain; Salina Abdul Samad; & Nooritawati Md. Tahir
2.45 pm – 3.00 pm	A3.03 ID#76 <b>FPGA Simulation of AD Converter by Using High Speed ADC and VHDL Programming for Partial Discharge Detection</b> Emilliano Emilliano; Chandan Kumar; Ahmad Basri; & Agileswari K. Ramasamy
3.00 pm – 3.15 pm	A3.04 ID#130 <b>Support Vector Machines for Automated Classification of Plastic Bottles</b> Shahrani Shahbudin; Aini Hussain; Dzuraidah Abd. Wahab; Mohd Marzuki Mustafa; & Suzaimah Ramli
3.15 pm – 3.30 pm	A3.05 ID#134 <b>Comparison of Performance using Daubechies Wavelet Family for Facial Expression Recognition.</b> Satiyan Marimuthu; Hariharan Muthusamy; & Nagarajan Ramachandran
3.30 pm – 3.45 pm	A3.06 ID#99 <b>Plastic Bottle Shape Classification Using Partial Erosion-Based Approach</b> Suzaimah Ramli; Mohd Marzuki Mustafa; Aini Hussain; & Dzuraidah Abd Wahab
3.45 pm – 4.00 pm	A3.07 ID#33 <b>UKM Bus Monitoring System Using RFID and GIS</b> Aishah Mahani Mustapha; Aini Hussain; & Hassan Basri

---

**Technical Session A4 – Saturday, 22<sup>nd</sup> MAY 2010**  
**Time: 4.15 pm – 5.30 pm**  
**Venue: Tiara 3, 4 (1<sup>st</sup> Floor)**

---

4.15 pm – 4.30 pm	A4.01 ID#66 <b>Stabilization and Enhancement of Videocapillaroscopy of Human Blood Vessel Microcirculation</b> Maher I. Rajab; Stephen P. M; Ian M. Stockford; & John A. Crowe
4.30 pm – 4.45 pm	A4.02 ID#91 <b>Fuzzy Voice Segment Classifier for Voice Pathology Classification</b> Paulraj M P & Sathees kumar Natraj
4.45 pm – 5.00 pm	A4.03 ID#132 <b>Potential Neuroprotective Effect of NHA56 Herbs Extract on Hydrogen Peroxide-Induced SH-SY5Y Cell Lines</b> Nur Hana Md Piah; Khairul Aizat Mohd Sharin; & Mazatulikhma Mat Zain
5.00 pm – 5.15 pm	A4.04 ID#133 <b>Potential Neuroprotective effect of Commercial Bacopa monniera Extract</b> Nor-Aainaa Md Zandar; Mazatulikhma Mat Zain
5.15 pm – 5.30 pm	A4.05 ID#38 <b>Structural Steel Plate Damage Detection using DFT Spectral Energy and Artificial Neural Network</b> Paulraj Murugesu Pandian; Mohd Shukry Abdul Majid; Sazali Yaacob; Abdul Hamid Adom; & Pranesh Krishnan Ragunathan

---

## Technical Session A5 – Sunday 23<sup>rd</sup> MAY 2010

**Time: 8.30 am – 11.00 am**

**Venue: Tiara 3, 4 (1<sup>st</sup> Floor)**

---

8.30 am – 8.45 am	A5.01 ID#73 <b>Detection of Infant Hypothyroidism with Mel Frequency Cepstrum Analysis and Multi-Layer Perceptron Classification</b> Azlee Zabidi; Wahidah Mansor; Ihsan Mohd Yassin; & Rohilah Sahak
8.45 am – 9.00 am	A5.02 ID#123 <b>The Effect of Delays on the Performance of Layer Recurrent Network</b> Ching Li Tey; Farah Hani Nordin; & Keem Siah Yap
9.00 am – 9.15 am	A5.03 ID#138 <b>Design and Development of Intelligent Anomalous Behaviour And Event Detection System</b> Mohamad Hanif Md Saad & Aini Hussain
9.15 am – 9.30 am	A5.04 ID#39 <b>Vehicle Noise Comfort Level Indication: A Psychoacoustics Approach</b> Allan Melvin Andrew; Paulraj Murugesu Pandian; & Sazali Yaacob
9.30 am – 9.45 am	A5.05 ID#50 <b>A Design, Analysis and Optimization Technique of 1.9 GHz CDMA Low Noise Amplifier</b> Mehdi Rahnama; : Alishir Moradi Kordalivand; & Masoud Vafaei
9.45 am – 10.00 am	A5.06 ID#131 <b>Classroom Speech Intelligibility Prediction Using Elman Neural Network</b> Mohammad Ridhwan Tamjis; Paul Raj Murugesu Pandian; Sazali Yaacob; & Ahmad Nazri Abdullah
10.00 am – 10.15 am	A5.07 ID#89 <b>Recognizing Motor Imagery using Dynamic Cascade Feed-forward Neural Networks</b> Hema C.R.
10.15 am – 10.30 am	A5.08 ID#115 <b>Improving Gas Component Detection of an Ultrasonic Tomography System for Monitoring Liquid/Gas Flow</b> N.M. Nor Ayob; S. Yaacob; Z. Zakaria; M. H. Fazalul Rahiman; R. Abdul Rahim; & M. R. Manan
10.30 am – 10.45 am	A5.09 ID#136 <b>Implementation of an Object Recognition Algorithm Using Normalized Mutual Information</b> Fadzliana Saad Saad & Rainer Stotzka
10.45 am – 11.00 am	A5.10 ID#64 <b>Design, Fabrication and Characterization of Conductivity Sensor using Printed Circuit Board</b> Ahmad Sabirin Zoolfakar; Mohd Faizul Idros; & Maizulton Zolkapli

---

**Technical Session B1 – Saturday 22<sup>nd</sup> MAY 2010**

**Time: 8.30 am – 10.30 am**

**Venue: Hibiscus 1, 2 (Ground Floor)**

---

8.30 am – 8.45 am	B1.01 ID#16 <b>Robot Chair Control using an Asynchronous Brain Machine Interface</b> Hema C.R.; Paulraj M.P.; Sazali Yaacob; Abdul Hamid Adom; Nagarajan R.; & Erdy S.M. Tan
8.45 am – 9.00 am	B1.02 ID#105 <b>Background Modelling and Background Subtraction Performance for Object Detection</b> Shahrizat Shaik Mohamed; Nooritawati Md Tahir; & Ramli Adnan
9.00 am – 9.15 am	B1.03 ID#41 <b>Brain Machine Interface for Physically Retarded People using Colour Visual Tasks</b> Divakar Purushothaman
9.15 am – 9.30 am	B1.04 ID#114 <b>Guaranteed Robust State Feedback Controller via Constrained Optimization Using Differential Evolution</b> Mahmud Iwan Solihin; Ari Legowo; & Rini Akmeliawati
9.30 am – 9.45 am	B1.05 ID#122 <b>Visual Based SLAM Using Modified PSO</b> William Low; Nagarajan Ramachandran; & Sazali Yaacob
9.45 am – 10.00 am	B1.06 ID#90 <b>Model Identification and Controller Design for Real-Time Control of Hydraulic Cylinder</b> Ramli Adnan; Mohd Hezri Fazalul Rahiman; & Abd Manan Samad
10.00 am – 10.15 am	B1.07 ID#102 <b>Model Identification and Controller Design for Servomotor</b> Norlela Ishak; Nor Idayu Abdullah; Mohd Hezri Fazalul Rahiman; Abd Manan Samad; & Ramli Adnan
10.15 am – 10.30 am	B1.08 ID#135 <b>Assignments Acceptance Strategy in a Modified PSO Algorithm to Elevate Local Optima in Solving Class Scheduling Problems</b> Mohd Azri Abdul Aziz, Mohd Nasir Taib & Naimah Hussein

---

**Technical Session B2 – Saturday 22<sup>nd</sup> MAY 2010**  
**Time: 10.45 am – 12.45 pm**  
**Venue: Hibiscus 1,2 (Ground Floor)**

---

10.45 am – 11.00 am	B2.01 ID#92 <b>EEG Signal Recognition for Brain Word Interface using Wavelet Decomposition</b> Hema C.R.
11.00 am – 11.15 am	B2.02 ID#93 <b>Single Trial Analysis on EEG Signatures to Identify Individuals</b> Hema C.R.
11.15 am – 11.30 am	B2.03 ID#101 <b>Noise variation test for ARX model of a heating process in essential oil extraction plant</b> Nurlaila Ismail; Mohd Hezri Fazalul Rahiman; & Mohd Nasir Taib
11.30 am – 11.45 am	B2.04 ID#113 <b>Design of a 6 bit phase shifter S Band frequency and tunability with neural network</b> Alishir Moradi Kordalivand; Iman Chaharmahali; & Mohammad Sajad Kousari
11.45 am – 12.00 pm	B2.05 ID#116 <b>Comparison of classical and orthogonal UWB waveforms for radar application</b> Laila Sakkila; Atika Rivenq; Charles Tatkeu; Yassin Elhillali; & Fouzia Boukour
12.00 pm – 12.15 pm	B2.06 ID#107 <b>Initial Investigation of the Alpha and Beta Bands for Smokers Using EEG</b> Zodie Mohamed Hanafiah; Zunairah Hj Murat; Mohd Nasir Taib; & Sahrim Lias
12.15 pm – 12.30 pm	B2.07 ID#110 <b>Initial Investigation on Alpha Asymmetry during Listening to Therapy Music</b> Siti Armiza Mohd Aris; Norizam Sulaiman; Noor Hayatee Abdul Hamid; & Mohd Nasir Taib
12.30 pm – 12.45 pm	B2.08 ID#127 <b>GISTDA EOC Synthetic Aperture Radar Data Processing System</b> Ussanai Nithirochananont; Sorawat Chivapreecha; Chanchai Peanvijarnpong; & Kobchai Dejhan

---

**Technical Session B3 – Saturday 22<sup>nd</sup> MAY 2010**

**Time: 2.15 pm – 4.00 pm**

**Venue: Hibiscus 1, 2 (Ground Floor)**

---

2.15 pm – 2.30 pm	B3.01 ID#56 <b>A Feasibility Study of Building Structural Deformation Monitoring Using Global Positioning System (GPS), Terrestrial Surveying Technique (TST) and Crack Gauge Measurement (CGM)</b> Mat Rahim Ibrahim; Jasmee Jaafar; Zahrullaili Yahya; & Abd. Manan Samad
2.30 pm – 2.45 pm	B3.02 ID#57 <b>Sustainable Groundwater Potential Zone Using Remote Sensing and GIS</b> Siti Nor Eliza Mohd Nadun; Ismail Maarof; Rosmadi Ghazali1; Abd. Manan Samad; & Ramli Adnan
2.45 pm – 3.00 pm	B3.03 ID#58 <b>Evaluating the Range of Differences Between GPS Raptic-Static Observed Orthometric Height with the Digital Precise Levelling</b> Rosmadi Ghazali; Mohd Rozaimi Abd Hamid; Che Senu Salleh; & Abd Manan Samad
3.00 pm – 3.15 pm	B3.04 ID#59 <b>Evaluating Gps For Datum Transfer In Hydrography</b> Anizai Yahya; Mat Salam Karnadi; Sharifah Norashikin Bohari; & Azman Mohd. Suldi
3.15 pm – 3.30 pm	B3.05 ID#60 <b>The Accuracy Comparison of Height From DTM Constructed Using Stop And Go With RTK Gps for GIS Application</b> Rosmadi Ghazali; Nor Baizura Hasim; Khairil Afendy Hashim; Siti Aishah Abd Rahim; & Abd Manan Samad
3.30 pm – 3.45 pm	B3.06 ID#72 <b>Pixel Based Urban Growth Model for Predicting Future Pattern</b> M. Zamani Zainal Abiden; Siti Z. Z. Abidin; & M.Nabil F. Jamaluddin
3.45 pm – 4.00 pm	B3.07 ID#81 <b>Extracting gap and canopy properties using LiDAR and multispectral data for forest microclimate modelling</b> Zulkiflee Abd Latif; & George A. Blackburn

---

**Technical Session B4 – Saturday, 22<sup>nd</sup> MAY 2010**  
**Time: 4.15 pm – 5.45 pm**  
**Venue: Hibiscus 1,2 (Ground Floor)**

---

4.15 pm – 4.30 pm	B4.01 ID#82 <b>Characterising Reedbed Habitat Quality using Leaf-off LiDAR data</b> Alex O. Onojeghuo; George A. Blackburn; & Zulkiflee Abd Latif
4.30 pm – 4.45 pm	B4.02 ID#87 <b>Applicability of Geographical Information System (GIS) in Assessing the Accessibility and Mobility of Urban Lower-income Family Living</b> Zaharah Mohd Yusoff; Dasimah Omar; Kamaluddin Hj. Talib; & Abd.Manan Abd.Samad
4.45 pm – 5.00 pm	B4.03 ID#95 <b>Aerial Mapping using High Resolution Digital Camera and Unmanned Aerial Vehicle for Geographical Information System</b> Anuar Ahmad & Abd. Manan Samad
5.00 pm – 5.15 pm	B4.04 ID#96 <b>Assessment of Digital Camera for Mapping Stream using Close Range Photogrammetric Technique</b> Anuar Ahmad; Natasha Ishak;& Abd. Manan Samad
5.15 pm – 5.30 pm	B4.05 ID#97 <b>Optimal Location of Property in United Arab Emirates using Geographical Information System</b> Saeed Mohammed Sultan Al Khaili; Anuar Ahmad; & Abd. Manan Samad
5.30 pm – 5.45 pm	B4.06 ID#23 <b>Breathalyzer Enabled Ignition Switch System</b> Herlina Abdul Rahim & Syed Daud Syed Hassan
5.45pm – 6.00 pm	B4.06 ID#24 <b>Grasp Hand Approach to Detect the Attentiveness and Fatigue of Driver via Vibration System,</b> Herlina Abdul Rahim & Zulkifli Mohd Yusop

---

## Technical Session B5 – Sunday 23<sup>rd</sup> MAY 2010

**Time: 8.30 am – 11.00 am**

**Venue: Hibiscus 1, 2 (Ground Floor)**

---

8.30 am – 8.45 am	B5.01 ID#1 <b>Logical Effort using Particle Swarm Optimization Algorithm – An Examination on the 8-Stage Full Adder Circuit</b> Aiman Johari; Hasliza Abu Hassan; Abdul Karimi Halim; Azlee Zabidi; & Ihsan Yassin
8.45 am – 9.00 am	B5.02 ID#2 <b>Optimizing Filter Parameters Using Particle Swarm Optimization</b> Nik Ahmad Nizam Nik Zainuddin; Ihsan Yassin; Azlee Zabidi; Hasliza Abu Hassan; & Nooritawati Md Tahir
9.00 am – 9.15 am	B5.03 ID#21 <b>Ensemble Dual Recursive Learning using Recursive Least Square (RLS) and Recursive Instrument Variable (RIV) Algorithms for Identifying Flow with Leakage</b> Afifi Md Akib; Nordin Saad; Vijanth Sagayan Asirvadam
9.15 am – 9.30 am	B5.04 ID#74 <b>An Orthogonal Least Square Approach to Select Features of Infant Cry with Asphyxia</b> Rohilah Sahak; Wahidah Mansor; Lee Yoot Khuan; Ahmad Ihsan Mohd Yassin; & Azlee Zabidi
9.30 am – 9.45 am	B5.05 ID#103 <b>Classification of Parkinson's Disease Based on Multilayer Perceptrons Neural Network</b> Zahari Abu Bakar; Nooritawati Md Tahir; & Ihsan M. Yassin
9.45 am – 10.00 pm	B5.06 ID#10 <b>Moving Vehicle Noise Classification Using Back-Propagation Algorithm</b> Norasmadi Abdul Rahim; Paulraj Murugesu Pandian; Abdul Hamid Adom; & Sathish Kumar Sugumaran
10.00 am – 10.15 am	B5.07 ID#22 <b>EEG Different Frequency Sound Response Identification using Neural Network and Fuzzy Techniques</b> Rubita Sudirman, A.C. Koh, N.M. Safri, W.B. Daud, N.H. Mahmood
10.15 am – 10.30 am	B5.08 ID#30 <b>PD Fuzzy Logic with Non-located PID Approach for Vibration Control of Flexible Joint Manipulator</b> Mohd Ashraf Ahmad; Mohd Helmi Suid; Mohd Syakirin Ramli; : Mohd Anwar Zawawi; & Raja Mohd Taufika Raja Ismail
10.30 am – 10.45 am	B5.09 ID#40 Effect of Chaos Noise on the Learning Ability of Back Propagation Algorithm in Feed Forward Neural Network Azian Azamimi Abdullah; Yoko Uwate; & Yoshifumi Nishio
10.45 pm – 11.00 pm	B5.10 ID#78 <b>Comparison between Levenberg-Marquardt and Scaled Conjugate Gradient Training Algorithms for Breast Cancer Diagnosis using MLP</b> Nadiah Mohamad; Fatimah Zaini; Aiman Johari; Ihsan Yassin; & Azlee Zabidi

---