

## CONFERENCE SCHEDULE

Day 1: Tuesday, 11 May 2010						
9:00 – 10:30 AM	Opening Ceremony (Prince Ballroom)					
10:30- 11:00 AM	Coffee Break					
11:00-11:50 AM	Plenary Session I (Prince Ballroom) Speaker: Prof. Dr. Thomas Martin McGinnity (University of Ulster, UK)					
12:00 -12:50 PM	Plenary Session II (Prince Ballroom) Speaker: Prof. Dr. Miftahur Rahman (North South University, Bangladesh)					
1:00-2:00 PM	Lunch and Prayer Break					
2:00-3:30 PM	Parallel Technical Sessions					
	<b>1A-SIP</b> (Prince 1)	<b>1B-OPC</b> (Prince 2)	<b>1C-ASN</b> (Prince 3)	<b>1D-VLSI</b> (Prince 4)	<b>1E-MC</b> (Ballroom) A	<b>1F-NNI</b> (Ballroom) B
3:30-4:00 PM	Refreshment					
4:00-5:30 PM	Parallel Technical Sessions					
	<b>2A-SIP</b> (Prince 1)	<b>2B-OPC</b> (Prince 2)	<b>2C-ASN</b> (Prince 3)	<b>2D-AP</b> (Prince 4)	<b>2E-CNS</b> (Ballroom) A	<b>2F-NNI</b> (Ballroom) B
8:00 PM	Banquet Dinner					
Day 2: Wednesday, 12 May 2010						
8:40-9:30 AM	Plenary Session III (Prince Ballroom) Speaker: Dr. Ong Sze Wei (Intel Penang Design Center, Malaysia)					
9:30-10:20 AM	Plenary Session IV (Prince Ballroom) Speaker: Dr. Shuji Tanaka (Tohoku University, Japan)					
10:20-10:50	Coffee Break					
11:00-11:50	Plenary Session V (Prince Ballroom) Speaker: Prof. Dr. Aziz Deraman (University Malaysia Terenganu, Malaysia)					
11:50-12:50 PM	Parallel Technical Sessions					
	<b>3A-SIP</b> (Prince 1)	<b>3B-OPC</b> (Prince 2)	<b>3C-AP</b> (Prince 3)	<b>3D-CAD</b> (Prince 4)	<b>3E-MAT</b> (Ballroom)	
1:00-2:00 PM	Lunch and Prayer Break					
2:00-3:30 PM	<b>4A-SIP</b> (Prince 1)	<b>4B-OPC</b> (Prince 2)	<b>4C-KBT</b> (Prince 3)	<b>4D-SSW</b> (Prince 4)	<b>4E-DBM</b> (Ballroom) A	<b>4F-INS</b> (Ballroom) B
3:30-4:00 PM	Refreshment					
4:00-5:30 PM	<b>5A-SIP</b> (Prince 1)	<b>5B-NRQ</b> (Prince 2)	<b>5C-CNS</b> (Prince 3)	<b>5D-SSW</b> (Prince 4)	<b>5E-DBM</b> (Ballroom) A	<b>5F-INS</b> (Ballroom) B

## Day 1: Tuesday, 11 May 2010

### Plenary Session I

#### **INTELLIGENT SYSTEMS: FROM BRAIN SCIENCE TO INTELLIGENT MACHINES**

**Prof. Dr. Thomas Martin McGinnity (University of Ulster, UK)**

11:00-11:50 AM (Prince Ballroom)

Chairperson: Prof. Dr. Momoh Jimoh E-Salami

### Plenary Session II

#### **AN OPTICAL FAST-FREQUENCY HOPPING CODE DIVISION MULTIPLE ACCESS (OFFH-CDMA) SYSTEM**

**Prof. Dr. Miftahur Rahman (North South University, Bangladesh)**

12:00-12:50 AM (Prince Ballroom)

Chairperson: Prof. Dr. Khalid Al-Khateeb

### Technical Session 1A: Signal and Image Processing (SIP)

Chairperson: Dr. Jalel Chebil

2:00-3:30 PM ( Prince1)

ID	Title, Author(s) and affiliation
15	<b>Performance of Keystroke Biometrics Authentication System Using Artificial Neural Network (ANN) and Distance Classifier Method</b> Norhaslinda Harun, W. L. Woo and S.S. Dlay Newcastle University, United Kingdom
40	<b>Self-Localization of Swarm Robots Based on Voice Signal Acquisition</b> Farshad Arvin, Shyamala Doraisamy, Khairulmizam Samsudin, and Abdul Rahman Ramli University of Putra Malaysia, Malaysia
45	<b>The Recognition of Arabic Writing By Fuzzy System</b> Soulef Nemouchi, Nadir Farah University Badji Mokhtar Annaba, Laboratory Labged, Algeria
46	<b>Performance Analysis of Block Matching Algorithms in Motion Estimation</b> R. A. Manap, M. Esro, A. A. Basari, and B. H. Ahmad Universiti Teknikal Malaysia Melaka, Malaysia
48	<b>Development of a Flexible Video Analysis System for Motion Detection and Alarm Generation</b> Amir Akramin Shafie, Md. Hazrat Ali, Fadhlan Hafiz, Roslizar M.Ali International Islamic University Malaysia, Malaysia
52	<b>Incorporated Preprocessing and Physical Layout Analysis of a Binary Document Image Using a Two Stage Classification</b> Hamed Behin, Afshin Ebrahimi, Sepideh Ebrahimi Sahand University Of Technology, Iran

### Technical Session 1B: Optical Communications and Photonics (OPC)

Chairperson: Dr. Khaizuran Abdullah

2:00-3:30 PM (Prince 2)

ID	Title, Author(s) and affiliation
24	<b>Performance Modeling And Evaluation of Recirculation Optical Buffer</b> Tony Tsang Hong Kong Polytechnic University, Hong Kong
72	<b>The Effect of Weather Attenuations on Free Space Optical Communication (FSO) Link Under Tropical Weather Conditions</b> Suriza Ahmad Zabidi, Wajdi A.L. Khateeb, Md. Rafiqul Islam and A.W. Naji ECE Dept, Faculty of Engineering, IIUM, Malaysia
74	<b>Bidirectional Optical Add/Drop Multiplexer (OADM) for CWDM PON System</b> Sahrul Hilmi Ibrahim, Abu Bakar Mohammad TM R&D S/B, Photonics Technology Centre, UTM Malaysia
78	<b>G-PON System And The Interoperability Challenge</b> Sahrul Hilmi, Ismail Abdan TM R&D Sdn Bhd, Malaysia
104	<b>Strategy on Implementing Genetic Algorithm on FPGA For Polarization Control Application</b> Aida Esmaeilian Marnani, Ghazaleh Mamdoohi, Ahmad Fauzi Abas, Khairulmizam Samsudin, Aria Hidayat, Noor Hisham Ibrahim University Putra Malaysia(Upm), Malaysia
123	<b>Efficient Pulse Compression In Photonic Crystal Fibre at 850 Nm</b> Abdosllam M. Abobaker, R. Vasantha Jayakantha Raja, K. Senthilnathan, K. Porsezian, K. Nakkeeran, The Higher Institute of Electronics, Bani-Waild, Libya, University of Aberdeen, United Kingdom

### Technical Session 1C: Ad-hoc and Sensor Networks (ASN)

Chairperson: Prof. Dr. Farhat Anwar

2:00-3:30 PM (Prince 3)

ID	Title, Author(s) and affiliation
7	<b>Position-based QoS Multicast Routing Protocol for Mobile Ad Hoc Networks</b> Mohammad Qabajeh, Aisha-Hassan A. Hashim, Othman Khalifa, Liana Qabajeh International Islamic University Malaysia, University of Malaya, Malaysia
16	<b>Minimization of Overlapping Coverage In Wireless Sensor Networks With Area-Aware Coverage</b> Md. Amirul Islam, Rushdi Shams, Md. Zahirul Islam Khulna University of Engineering & Technology (KUET), Bangladesh
26	<b>Improving Quality of Service in MANET using RFID</b> Seyed Mohammad Ali Tahami , Arash Dana Central Tehran Branch, Islamic Azad University, Iran
32	<b>Adaptive Rs-Group Scheduling for Wimax Multihop-Relay</b> Rashid A. Saeed, Sahar A. Al-Talib, Tariq A. Al Ahdal, Hafizal Mohamad, Mazlan Abbas and, B. M. Ali International Islamic University Malaysia MIMOS and UPM, Malaysia

## Technical Sessions

- 87 **A Simulation Based performance comparison of routing protocol on Mobile Ad-hoc Network (Proactive, Reactive and Hybrid)**  
Md. Arafatur Rahman, Farhat Anwar, Janatul Naeem, Md.Sharif Minhazul Abedin Minhazul Abedin  
International Islamic University Malaysia, Malaysia
- 98 **Alternate Link Maximum Energy Level Ad Hoc Distance Vector Scheme for Energy Efficient Ad Hoc Networks Routing**  
Tai Hieng Tie, Chong Eng Tan, Sei Ping Lau  
University Malaysia Sarawak, Malaysia

### Technical Session 1D: VLSI Design (VLSI)

Chairperson: Dr. Muhammad Ibrahimy

2:00-3:30 PM (Prince 4)

ID	Title, Author(s) and affiliation
3	<b>Design And Implementation of High Performance Direct Digital Synthesizer For Software Defined Radio</b> Menakadevi Thangavelu, Madheswaran M Adhiyamaan College Of Engineering, India
9	<b>Application Of Simulated Annealing To Cluster-Boundary Search Algorithm For Macrocell Placement Optimization</b> Mustahsan Mir Ajman University of Science & Technology, United Arab Emirates
165	<b>Design of Capacitive Measuring Systems For High Frequency Band Sensor Transducer</b> Nurul Arfah Che Mustapha, A.H.M Zahirul Alam, Sheroz Khan International Islamic University Malaysia, Malaysia
248	<b>Theoretical Modeling And Simulation of Mems Piezoelectric Energy Harvester</b> Aliza Aini Md Ralib, Anis Nurashikin, Hanim Salleh International Islamic University Malaysia, Malaysia
368	<b>A Study on Circuit Switching Merits In The Design of Network-on-Chip</b> Chin-Ee New, Norhayati Soin University of Malaya, Malaysia
12	<b>A 2.4-GHz 0.13 <math>\mu</math> m CMOS Downconversion Mixer</b> Nesreen Ismail, Othman Sedek Cedec Univirsiti Sains Malaysia, Malaysia
62	<b>Delay Locked Loop Designed In 0.18<math>\mu</math>m CMOS With Decreased Jitter Noise</b> Parisa Mahmoudi, Esmaeil Najafi Aghdam Sahand University Of Technology, Iran

**Technical Session 1E: 3G, 4G Mobile Communications (MC)**

Chairperson: Dr. Teddy Surya Gunawan

2:00-3:30 PM (Ball Room-A)

ID	Title, Author(s) and affiliation
93	<b>Electromagnetic Radiation From Mobile Phone Near Ear-Skull Region</b> Dayang Azra Awang Mat, Franky Kho, Kuryati Kipli, Annie Joseph, Shafrida Sahrani, Kasumawati Lias & Ade Syaheda Wani Marzuki Universiti Malaysia Sarawak, Malaysia
274	<b>Performance Evaluation of Sigma –Delta ADC For SDR Mobile Receivers With Aperture Jitter And Quantization Error</b> Preeti Trivedi Sgsits, Indore (M.P.), India
296	<b>Sensitive And Non-Sensitive DVB-T Mask For Coordination With IMT-Advanced Systems</b> Zaid Shamsan, Tharek Rahman, Muhammad Kamarudin Universiti Teknologi Malaysia (UTM), Malaysia
324	<b>Analysis Of A New Delay Enabled EDCF For Voice Transport Over IEEE802.11e</b> Nasser-Eddine Rikli, Mohammed Al-Rashed King Saud University, Saudi Arabia
325	<b>Medical Emergency And Healthcare Model: Enhancemet With Sms And Mms Facilities</b> Shihab A. Hameed, Vladimir Miho, Wajdi Alkhateeb, Aisha Hassan Faculty Of Engineering, International Islamic University Malaysia, Malaysia
372	<b>Design And Evaluation of Lightweight IEEE 802.11p-Based TDMA MAC Method For Road Side -To-Vehicle Communications</b> Rashid Saeed , International Islamic University Malaysia, Malaysia

**Technical Session 1F : Neural Networks and Intelligent Systems (NNI)**

Chairperson: Prof. Dr. Thomas Martin McGinnity

2:00-3:30 PM (Ball Room-B)

ID	Title, Author(s) and affiliation
4	<b>A Memory Model Based on Discrete Gabor Expansion of Signals</b> Subhendra Basu , Atrenta India Pvt Ltd, India
13	<b>Watermarking In Safe Region of Frequency Domain Using Complex -Valued Neural Network</b> Rashidah Funke Olanrewaju, Othman Khalifa, Aisha Hassan Abdulla, Abdurrazagg Ali Aburas International Islamic University Malaysia, Malaysia
28	<b>Rainfall Forecasting Models using Focused Time-Delay Neural Networks</b> Kyaw Kyaw Htike, Othman Omran Khalifa International Islamic University Malaysia, Malaysia

## Technical Sessions

- 97 **Comparison of Supervised and Unsupervised Learning Classifiers For Human Posture Recognition in Video Sequences**  
Kyaw Kyaw Htike, Othman O. Khalifa  
International Islamic University Malaysia, Malaysia
- 173 **A Coupled Artificial Neural Network And Rsm Model for The Prediction Of Chip Formation Instabilities in end Milling of Inconel 718**  
Md. Anayet Ullah Patwari, A.K.M Nurul Amin, Waleed F. Faris, Shuiyali Mukhtar  
International Islamic University Malaysia, Malaysia
- 268 **Evaluation of A Context Transfer-Based Approach to Improve The Handover In Mobile Multicast Environment**  
Azana Hafizah Mohd Aman, Aisha Hassan, Abdulrhman Mahfouz, Abdi Nasir Ahmed  
International Islamic University Malaysia, Malaysia

### Technical Session 2A: Signal and Image Processing(SIP)

Chairperson: Prof. Dr. Othman O. Khalifa

4:00-5:30 PM (Prince 1)

- | ID  | Title, Author(s) and affiliation , Author(s) and affiliation   |
|-----|--|
| 65  | <b>Contour Recognition of UGC Maps</b><br>Hossein Haddadian, Afshin Ebrahimi<br>Sahand University Of Technology, Iran  |
| 66  | <b>Special Character Recognition for Printed Farsi Subwords</b><br>Faegheh Fathi, Afshin Ebrahimi, Sepideh Ebrahimi<br>Sahand University Of Technology, Iran   |
| 77  | <b>Graphical User Interface For Humanoid Head AMIR-II</b><br>Amir Akramin Shafie, Mohd Farid Md Alias, Nahrul Khair Alang Rashid<br>International Islamic University Malaysia, Malaysia  |
| 85  | <b>Facial Emotion Detection using Gpso And Lucas-Kanade (LK) Algorithms</b><br>Bashir Mohammed Ghandi, R. Nagarajan, Hazry Desa<br>Universiti Malaysia Perlis (Unimap), Malaysia   |
| 101 | <b>Use Of The Cross Time-Frequency Distribution for The Analysis Of The Class of PSK Signals</b><br>Yen Mei Chee , Ahmad Zuri Sha'ameri<br>Universiti Teknologi Malaysia, Malaysia   |
| 136 | <b>Study of The Statistical Properties of Dynamic Features for Genuine And Forged Online Signature Samples</b><br>Nurhaniza Bakri, Asma Shakil, Sharifah Mumtazah Syed Ahmad, Rina Md Anwar, Masyura Ahmad Faudzi,<br>Universiti Tenaga Nasional, Malaysia |
| 156 | <b>Visual Tracking and Servoing of Human Face for Robotic Head Amir-II</b><br>Amir Akramin Shafie, Aseef Iqbal, Md. Raisuddin Khan<br>International Islamic University Malaysia, Malaysia  |

### Technical Session 2B: Optical Communications and Photonics (OPC)

Chairperson: Dr. Ahmed Wathik Naji

4:00-5:30 PM (Prince 2)

ID	Title, Author(s) and affiliation
124	<b>Generation and Dispersion Compensation Techniques for 10 Gb/s Radio-Over-Long Haul Fiber Span</b> Daw A. Asderah, Abdosllam M. Abobaker, Abdulbasit M. Negrat, K. Nakkeeran The Higher Institute of Electronics, Libyan Arab Jamahiriya
127	<b>Strain-Dependent Optical Properties of Mid-Infrared Gainsb/Gainalsb Quantum Well Laser</b> Md. Mahbub Hasan, Md. Rafiqul Islam Khulna University of Engineering And Technology, Bangladesh
128	<b>Crystal Orientation-Dependent Optical Properties of Mid-Infrared Gainsb/ Gainalsb Quantum Well Laser</b> Md. Mahbub Hasan, Md. Rafiqul Islam Khulna University of Engineering And Technology, Bangladesh
134	<b>A Computer Based Simulator for Erbium-Doped Fiber Amplifier</b> A.W. Naji, Fowzia Akhter, M. I. Ibrahimy, Belal Ahmed, M.A. Mahdi and H.R. Siddiquei International Islamic University Malaysia, Malaysia
196	<b>Design and Characterization of Single Photon APD Detector for QKD Application</b> Khalid A. S. Al-Khateeb, Nazmus Nafi, Khalid Hasan International Islamic University Malaysia, Malaysia
187	<b>Theoretical Analysis of Triple-Pass Erbium-Doped Fiber Amplifier</b> A.W. Naji, H.F.H. Ibrahim, Belal Ahmed, S.W. Harun and M.A. Mahdi International Islamic University Malaysia, Malaysia

### Technical Session 2C: Ad-hoc and Sensor Networks (ASN)

Chairperson: Dr. Wajdi Al-Khateeb

4:00-5:30 PM (Prince 3)

ID	Title, Author(s) and affiliation
33	<b>An Enhancement of Fault-Tolerant Routing Protocol for Wireless Sensor Network</b> Zamree Che-Aron, Wajdi Al-Khateeb, Farhat Anwar International Islamic University Malaysia, Malaysia
63	<b>Path Recovery Mechanism In 6LoWPAN Routing</b> Gee Keng Ee, Nor Kamariah Noordin, Borhanuddin Mohd. Ali., Chee Kyun Ng University Putra Malaysia, Malaysia
99	<b>Probabilistic Route Reliability with Distance</b> Hadi Sargolzaey, Sabira Khatun, Borhanuddin Mohd Ali University Putra Malaysia, Malaysia
145	<b>Maximum Throughput Analysis for Rts/Cts-Used IEEE 802.11 DCF in Wireless Multi-Hop Networks</b> Takuya Sugimoto, Nobuyoshi Komuro, Hiroo Sekiya, Shiro Sakata, Kengo Yagyū, Graduate School Of Advanced Integration Science, Chiba University, Japan

## Technical Sessions

172 **Simulation of A Surface-Transverse Wave (STW) Biosensor For DF-1 Cells**

Nadira Jamil, Anis Nurashikin Nordin, Maizirwan Mel, Ioana Voiculescu  
International Islamic University Malaysia, Malaysia

184 **Neighbor-Based Route Discovery for Mobile Ad hoc Networks**

Kedir Mohammed, Brahim Belhaouri Samir, Noohul Basheer Zain Ali  
Universiti Teknologi Petronas, Malaysia

### Technical Session 2D: Antennas and Propagation (AP)

Chairperson: Dr. A.H.M. Zahirul Alam

4:00-5:30 PM (Prince 4)

ID	Title, Author(s) and affiliation
212	<b>The Effect Of Particle Size Distributions On Dust Storm Attenuation Prediction For Microwave Propagation</b> Elfatih A. A. Elsheikh, Md. Rafiqul Islam, AHM Zahirul Alam, Ahmad Fadzil Ismail, Khalid Al-Khateeb , Zain Elabdin International Islamic University Malaysia, Malaysia
221	<b>Design and Optimization of Linear Array Antenna Based on the Analysis of Direction of Arrival (DOA) Estimation and Beamforming Algorithms</b> Ibrahim A. Haji, Md. Rafiqul Islam, Othman O. Khalifa , AHM Zahirul Alam, Sheroz Khan, Khaizuran A. Abdullah And Abubaker A. Yussuf International Islamic University Malaysia, Malaysia
223	<b>Circle Split Ring Resonator Inside Circularly Shaped Microstrip Antenna</b> Muhammad Ezanuddin Abdul Aziz, Mohd Fareq Abd Malek, Ping Jack Soh Universiti Malaysia Perlis (Unimap), Malaysia
230	<b>A Study on Performance of V-Slot Shapes on Rectangular Patch Antenna</b> Sahadah Ahmad, Hazila Othman, Dayang Khadijah Hamzah, Hasnah Ahmad Universiti Malaysia Perlis, Malaysia
287	<b>Genetic and Tabu Algorithm Based Array Synthesis for The Generation of A Shaped Beam Antenna</b> Ratna Subhashini Konidala, Pavan Kumar Koribilli, Saikiran Jagarlamudi National Institute of Technology,Rourkela, India
332	<b>A Triple-Band Dipole Antenna With 0.92 GHz AMC-HIS</b> Maisarah Abu, Mohamad Kamal A. Rahim, Mohamad Kadim Suaidi, Imran Mohd. Ibrahim, Norazura Mohd Nor, Universiti Teknologi Malaysia, Malaysia

### Technical Session 2E: Computer Networks and Security (CNS)

Chairperson: Dr. Aisha Hassan Abdalla

4:00-5:30 PM (Ball Room-A)

ID	Title, Author(s) and affiliation
5	<b>Efficient Hardware Realization of Rijndael AES Cryptographic Algorithm using state-of-the-art Reconfigurable Logic</b> Muhammad Rais, Syed Qasim King Saud University, Saudi Arabia



## Technical Sessions

- 25 **Nahrainfish: A Green Cryptographic Block Cipher**  
Sufyan (Faraj) Al-Janabi ,  
University Of Anbar, Iraq
- 30 **Using IP Networks as a Deviceless Storage for Future Portable Computers**  
Seyed Reza Kamel Tabbakh Farizani, Borhanuddin Mohd Ali,  
UPM, Malaysia
- 71 **Design of Wireless Vehicle Locking System using GSM Network**  
Mohd Helmy Abd Wahab, Herdawatie Abdul Kadir, Ayob Johari,  
Siti Fairoza Amalina Abdul Ghani, Mohamad Farhan Mohamad Mohsin, Rahmat  
Sanudin,  
Universiti Tun Hussein Onn Malaysia, Malaysia
- 115 **Network Security For QoS Routing Metrics**  
Ibrahim Almerhag, Abdulsalam Almrjami, Abduelbaset Goweder, Ali Elbekai  
Nasser Nations University, Libyan Arab Jamahiriya
- 166 **Implementation of IPv6 Address Generation Mechanism for Enterprise Wireless Local Area Network in Open Source DHCPv6**  
Akhmad Unggul Priantoro, Nashrul Hakiem, Mohammad Umar Siddiqi, Talib Hashim  
Hasan, A. Mutholib  
International Islamic University Malaysia, Malaysia

### Technical Session 2F: Neural Networks and Intelligent Systems (NNI)

Chairperson: Dr. Raisuddin Khan

4:00-5:30 PM (Ball Room-B)

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 11  | <b>A New Distributed Evolutionary Computation Technique For Multi-Objective Optimization</b><br>M.M.A. Hashem, Md. Asadul Islam, G. M. Mashrur-E-Elahi<br>Khulna University Of Engineering & Technology (KUET), Bangladesh  |
| 242 | <b>Application of Evolutionary Algorithm in Optimizing The Fuzzy Rule Base For Nonlinear System Modeling and Control</b><br>Pintu Chandra Shill, Muhammad Nazrul Islam, M.A.H Akhand, Shila Rani Das, Aruna Paul,<br>Khulna University Of Engineering And Technology (KUET), Bangladesh |
| 244 | <b>Hajj Crowd Simulation Based on Intelligent Agent</b><br>Willy Wahyu Mulyana, Teddy Surya Gunawan<br>International Islamic University Malaysia, Malaysia  |
| 278 | <b>Development of An Adaptive Headlamp Systems</b><br>Meftah Hrairi, Anwar Bakar<br>International Islamic University Malaysia, Malaysia   |
| 339 | <b>Genetic Algorithm with Fuzzy Crossover Selection</b><br>Mohammad Jalali Varnamkhasti , Lai Soon Lee<br>Universiti Putra Malaysia, Malaysia   |
| 371 | <b>Reduced Feature Set For Online Character Recognition</b><br>Muhammad Sadiq ,<br>UET Lahore, Pakistan   |

## Day 2: Wednesday, 12 May 2010

### Plenary Session III

#### **SYSTEM-ON-CHIP (SOC) DESIGNS FOR THE EMERGING COMPUTING AND CONNECTIVITY NEEDS**

**Dr. Ong Sze Wei** (*Intel Penang Design Center, Malaysia*)

8:40-9:30 AM (Prince Ballroom )

Chairperson: Dr. Muhammad Ibrahimy

### Plenary Session IV

#### **MICRO ELECTRO MECHANICAL SYSTEMS FOR FUTURE COMMUNICATION TOOLS**

**Dr. Shuji Tanaka** (*Tohoku University, Japan*)

9:30-10:20 AM (Prince Ballroom)

Chairperson: Prof. Dr. Mohammad Umar Siddiqi

### Plenary Session V

#### **SOFTWARE CERTIFICATION PROCESS: FROM THEORY TO PRACTICE**

**Prof. Dr. Aziz Deraman** (*University Malaysia Terenganu, Malaysia*)

11:00-11:50 AM (Prince Ballroom )

Chairperson: Dr. Shihab A. Hameed

### Technical Session 3A: Signal and Image Processing (SIP)

Chairperson: Dr. Omer Mahmoud

**11:50 - 12:50 PM (Prince 1)**

ID	Title, Author(s) and affiliation
56	<b>Foreground-Segmentation Based Human Detection With Shadow Removal</b> Fadhlan Hafiz Helmi, Othman O. Khalifa, Amir Akramin Shafie, Md. Hazrat Ali Kuliyyah Of Engineering, International Islamic University, Malaysia
96	<b>Farsi Document Image Skew Detection And Correction</b> Vahid Tabatabae, Afshin Ebrahimi, Javad Abbaszadeh Bargoshadi Sahand University Of Technology, Iran
138	<b>Detection And Correction of Deformed Historical Arabic Manuscripts</b> Sherif El-Etriby, Khalid Mohammad Amin Menoufia University, Faculty Of Computers And Information, Egypt
160	<b>Fast Mode Decision for Scalable Video Coding over Wireless Network</b> Haris Al Qodri Maarif, Teddy Surya Gunawan, Akhmad Unggul Priantoro International Islamic University Malaysia, Malaysia

**Technical Session 3B: Optical Communications and Photonics (OPC)**

Chairperson: Prof. Dr. Miftahur Rahman

**11:50 - 12:50 PM (Prince 2)**

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 215 | <b>Study Of Direct Detection Technique for Zero Cross Correlation Code in OCDMA</b><br>Mohd Rashidi Che Beson, Prof. Madya Dr. Syed Alwee Aljunid Syed Junid, Ir. Anuar Mat Safar<br>Universiti Malaysia Perlis, UniMAP, Malaysia                  |
| 217 | <b>Phase Shift Pulse Brillouin Optical Time Domain Analysis (PSP-BOTDA) Employing Dual Golay Codes</b><br>Mohd Saiful Dzulkefly Zan, Tsuneo Horiguchi, Takashi Sasaki, Daisuke Uchiyama<br>Shibaura Institute of Technology, Japan                 |
| 228 | <b>Novel Theoretical Modeling of Quadruple Pass Erbium Doped Fiber Amplifier</b><br>A.W. Naji, M. A. Mohammed, Belal Ahmed, S.W. Harun and M.A. Mahdi<br>International Islamic University Malaysia Malaysia  |
| 249 | <b>Numerical Study of Macro Bending Effect on High Concentration EDFA</b><br>Parsin Haji Reza, Soroush Abbasizargaleh, Siamak Dawazdah Emami, Sulaiman Wadi Harun , Hairul Azhar Abdul Rashid, Dr. Deepak Kumar<br>Multimedia University, Malaysia |

**Technical Session 3C: Antennas and Propagation (AP)**

Chairperson: Prof. Dr. Mazlina Esa

**11:50 - 12:50 PM (Prince 3)**

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 51  | <b>Design, analysis and simualtion of a C band frequency scanning slot-array antenna</b><br>Emad Hamidi<br>Nanomoj Co., Iran  |
| 210 | <b>Fade Dynamics Analysis for Terrestrial Microwave Links</b><br>Al-Hareth Zyoud, Hassan Dao, Md. Rafiqul Islam, Jalel Chebil, Khaled Al Khateeb, Tharek Abd Rahman<br>International Islamic University Malaysia, Malaysia                          |
| 211 | <b>Effect of Frequency on Fade Slope Based on Rain Attenuation Data Measured in Malaysia</b><br>Md. Rafiqul Islam, J. Chebil, Al-Hareth Zyoud, Othman O. Khalifa, Sheroz Khan and Hassan Dao<br>International Islamic University Malaysia, Malaysia |
| 233 | <b>Design of Multi –Band Passive RFID Tag Antenna</b><br>Abubeker A. Yussuf, Md Rafiqul Islam Islam, AHM Zahirul Alam, Othman O. Khalifa, Jalel Chebil, Hany E. Abdelraouf , Ibrahim A. Haji<br>International Islamic University Malaysia, Malaysia |

**Technical Session 3D: Computer Architecture and Design (CAD)**

Chairperson: Dr. Mohamed Rawidean Mohd Kaasim

**11:50 - 12:50 PM (Prince 4)**

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 116 | <b>Design And Implementation of Fuzzy Logic Based Scheduling Algorithm for Computational Grids</b><br>Ahmed Asif, Aisha Hassan Abdalla, Omer Mahmoud, Mohamad Sofian Abu Talip, Aburas A.A<br>International Islamic University Malaysia, Malaysia |
| 161 | <b>Implementation of SCADA System for DC Motor Control Control</b><br>Afarulrazi Abu Bakar, Hairulazwan Hashim, Md Zarafi Ahmad,<br>University Tun Hussein Onn Malaysia, Malaysia   |
| 168 | <b>Portability Issues in Grid Environment</b><br>Haya Mazhar, Aisha Hassan Abdalla, Othman O. Khalifa<br>International Islamic University Malaysia, Malaysia  |
| 243 | <b>Rapid Prototyping Platform for Stream-Oriented Reconfigurable Computing Applications</b><br>El-Bay Bourennane, Philippe Brunet<br>University Of Burgundy, France   |

**Technical Session 3E: Multiple Access Techniques (MAT)**

Chairperson: Dr. Akhmad Unggul Priantoro

**11:50 - 12:50 PM (Ball Room)**

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 23  | <b>Seamless Multimedia Service Continuity with 3GPP IMS Approach</b><br>Hui-Na Chua, Chor-Min Tan, Yuxin Ho<br>Malaysian Research Centre, British Telecommunications Group, Malaysia                                   |
| 204 | <b>Optical Code Division Multiple Access (OCDMA) using Double Weight (Dw) Codes For Local Area Network</b><br>Dayang Khadijah Hamzah, Dr Syed Alwee Aljunid Syed Junid<br>Universiti Malaysia Perlis(Unimap), Malaysia |
| 377 | <b>BER Analysis of Variable Sub-Carrier Bandwidth In OFDM Systems</b><br>Mohammad Tahir, Akhmad Unggul Priantoro<br>International Islamic University Malaysia, Malaysia  |
| 43  | <b>Serving Mankind: WIMAX E-Health Care System</b><br>Sadia Murawwat, Shen Ting-Zhi, Muhammad Salman Murawwat<br>Beijing Institute of Technology, China  |

**Technical Session 4A: Signal and Image Processing (SIP)**

Chairperson: Dr. Anis Nurashikin Nordin

**2:00-3:30 PM (Prince 1)**

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 175 | <b>Performance Analysis of Dirac Video Codec With H.264 / AVC</b><br>Issa Sinzobakwira, Othman Khalifa<br>International Islamic University Malaysia, Malaysia   |
| 177 | <b>Efficient Implementation of 3D Listless SPECK</b><br>Ruzelita Ngadiran, Said Bousakta, Ahmed Bouridane , Bayan Sharif<br>University Of Newcastle Upon Tyne, United Kingdom   |
| 190 | <b>A modified image encryption scheme based on 2D chaotic map</b><br>Rashidah Kadir, Rosdiana Shahril, Mohd Aizaini Maarof<br>Universiti Teknologi Malaysia, Malaysia   |
| 207 | <b>Speech Pitch Detection Using Short-Time Energy</b><br>Tian Swee Tan, Sheikh Hussain Shaikh Salleh, Mohd Redzuan Jamaludin<br>Universiti Teknologi Malaysia, Malaysia   |
| 213 | <b>Phonetically Rich and Balanced Arabic Speech Corpus: an Overview</b><br>Mohammad A. M. Abushariah, Raja N. Ainon, Roziati Zainuddin, Othman O. Khalifa, Moustafa Elshafei,<br>University Of Malaya, Malaysia   |
| 214 | <b>Natural Speaker-Independent Arabic Speech Recognition System Based on Hidden Markov Models Using Sphinx Tools</b><br>Mohammad A. M. Abushariah, Raja N. Ainon, Roziati Zainuddin, Moustafa Elshafei , Othman O. Khalifa,<br>University Of Malaya, Malaysia |

**Technical Session 4B: Optical Communications and Photonics (OPC)**

Chairperson: Dr. Hafizal Mohamad

**2:00-3:30 PM (Prince 2)**

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 36  | <b>External Stress Effects on Polarization Mode Dispersion of Birefringent Optical Fibers</b><br>M. Shah Alam , Shama Naz Islam, Kaniz Fatima, Shamima Najnin,<br>Bangladesh University Of Engineering And Technology (Buet), Bangladesh       |
| 265 | <b>Security Enhancement for Spectral Amplitude coding OCDMA based on Hybrid EDW/M seq. code systems</b><br>Hesham Abdullah Bakarman, Feras N. Hasoon, Sahbudin Shaari, Mahamod Ismail<br>Universiti Kebangsaan Malaysia, Malaysia              |
| 309 | <b>Nonlinear Optical Effects Suppression Methods in WDM Systems with EDFAs: A Review</b><br>Nordiana Mohamad Saaid ,<br>Universiti Malaysia Perlis, Malaysia   |
| 340 | <b>Performance analysis of decision feedback time domain equalizer for direct-detection optical OFDM transmission in long-distance SSMF</b><br>Mohammad Ghanbarisabagh , M. Y. Alias and H. A. Abdul-Rashid<br>Multimedia University, Malaysia |

## Technical Sessions

- 343 **Bragg Grating and Fabry-Perot Filters in Data Transmission by Laser Beams**  
El-Sayed El-Badawy, Mohamed Mabrouk  
Alexandria Higher Institute of Engineering & Technology, Alexandria, Egypt
- 360 **Impact of Fiber Optic Dispersion on The Performance of OFDM-QAM System**  
Khalid A. S. Al-Khateeb, Fowzia Akhter, Rafiqul Islam  
International Islamic University Malaysia, Malaysia

### Technical Session 4C: Agents, Knowledge-Based Technologies (KBT)

Chairperson: Prof. Dr. Aziz Deraman

2:00-3:30 PM (Prince 3)

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 19  | <b>Automation of Ontology Development From Concept Taxonomy</b><br>Naychi Lai Lai Thein ,<br>University of Computer (Hinthada), Myanmar   |
| 139 | <b>Knowledge-Based Disk Scheduling Policy using Fuzzy Logic</b><br>Mohamad Sofian Abu Talip, Aisha Hassan Abdalla, Abdurazzag Ali Aburas ,<br>A.H.M Zahirul Alam, Ahmed Asif<br>International Islamic University Malaysia, Malaysia     |
| 144 | <b>A Collaborative Navigation Algorithm For Multi-Agent Robots In Autonomous Reconnaissance Mission</b><br>Mohiuddin Ahmed, Md. Raisuddin Khan, Md. Masum Billah, Soheli Farhana<br>International Islamic University Malaysia, Malaysia |
| 200 | <b>Principal Component Analysis of Coupling Measures For Developing High Quality Object Oriented Software</b><br>K.M Azharul Hasan, Mohammad Sabbir Hasan<br>Khulna University of Engineering & Technology, Bangladesh                  |
| 253 | <b>Intelligence Traveling Schedule Recommender Based on Commonsense Reasoning Algorithm</b><br>Chen-Shu Wang, Chun-Yi Li, Chia-Chuan Yeh<br>Chung Hua University, Taiwan, Province of China   |
| 329 | <b>Applying Six Sigma for Quality Assessment in a eLearning Courseware Production Process</b><br>Kuldeep Nagi ,<br>Assumption University, Thailand  |

### Technical Session 4D: Satellite, Space and Wireless Communications (SSW)

Chairperson: Dr. Rashid A. Saeed

2:00-3:30 PM (Prince 4)

- | ID | Title, Author(s) and affiliation   |
|----|--|
| 58 | <b>A Simple and Cost Effective Data Acquisition System for Mobile Satellite Experimental Work under Tree-shadowed and Building-shadowed</b><br>Voon Pai Bong, Wan Azlan Wan Zainal Abidin, Ibrahim Abba, Al-Khalid Othman, Hushairi Zen, T. Masri<br>Universiti Malaysia Sarawak, Malaysia |

## Technical Sessions

- 60 **Open Space Experimental Work for L-Band Mobile Satellite (MS) using a Simple and Low Cost Data Acquisition System**  
Ibrahim Abba, Voon Pai Bung, Wan Azlan Wan Zainal Abidin, Alkhalid Othman, K. Hong Ping  
University of Malaysia Sarawak (Unimas), Malaysia
- 113 **High Gain CMOS Low Noise Amplifier With 2.6 GHz Bandwidth**  
Shervin Ehrampoosh, Ahmad Hakimi,  
Kerman Graduate University of Technology, Iran
- 227 **Effect on Source Signal Condition for Pyramidal Microwave Absorber Performance**  
Nornikman Hassan, Mohd Fareq Abd Malek, Soh Ping Jack, Azremi Abdullah Al-Hadi  
Universiti Malaysia Perlis, Malaysia
- 295 **Read Diode Loaded Tunable Rectangular Microstrip Antenna**  
Dinesh Kumar Srivastava, Jai Prakash Saini, Durg Singh Chauhan  
B.I.E.T, Jhansi, (U.P.), India
- 353 **Design of a Low Noise Amplifier with GaAs MESFET at ku\_Band**  
Md. Rafiqul Islam, AHM Zahirul Alam, Sheraz Khan, Arafat A A Shabana  
International Islamic University Malaysia, Malaysia

### Technical Session 4E: Data Mining and Database Applications (DBM)

Chairperson: Dr. Shihab A. Hameed

2:00-3:30 PM (Ball Room-A)

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 14  | <b>Corpus-based Web Document Summarization using Statistical and Linguistic Approach</b><br>M.M.A. Hashem, Rushdi Shams, Afrina Hossain, Suraiya Rumana Akter, Monika Gope,<br>Khulna University of Engineering & Technology (KUET), Bangladesh |
| 38  | <b>Algebraic Reduction In Automatic Text Summarization -The State of Art</b><br>Nowshath Kadhar Batcha , Ahmed. M. Zaki<br>International Islamic University Malaysia, Malaysia  |
| 149 | <b>The effect of labeled sample scales on semi-supervised text clustering</b><br>Renchu Guan, Xiaohu Shi, Maurizio Marchese, Chen Yang, Yanchun Liang,<br>The College of Computer Science And Technology, Jilin University, China               |
| 151 | <b>Decision Tree Induction Using Genetic Programming Incorporates the Linear Machine Decision Tree for Data Classification</b><br>Noor Azilah Pakri, Abdul Razak Hussain<br>Universiti Teknikal Malaysia Melaka, Malaysia                       |
| 288 | <b>KNN-Kernel based Clustering for Spatio-Temporal Database</b><br>Aina Musdholifah, Siti Zaiton, Ito Wasito<br>Universiti Teknologi of Malaysia, Malaysia  |
| 308 | <b>Characteristics Determination on Scientific Computing Library Portal</b><br>Mohd Shahizan Othman, Lizawati Mi Yusuf, Norma Alias, Umi Nadia Abdul Basitt<br>Universiti Teknologi Malaysia, Skudai, Johor, Malaysia                           |

**Technical Session 4F: Instrumentation and Control (INS)**

Chairperson: Dr. Sheroz Khan

**2:00-3:30 PM (Ballroom B)**

ID	Title, Author(s) and affiliation
59	<b>Estimation of Effects of Alpha Music on EEG Components by Time and Frequency Domain Analysis</b> Vijayalakshmi K, Dr.Ramachandran S, Susmita Sridhar, Payal Khanwani Department of Medical Electronics, BMS College of Engineering, Bangalore, India
61	<b>Home Appliances Controller using Wireless Controller Area Network (WCAN) System</b> Wei Lun Ng, Chee Kyun Ng, Nor Kamariah Noordin, Fakhrol Zaman Rokhani, Borhanuddin Mohd. Ali. University Putra Malaysia, Malaysia
81	<b>Electronic Nose to Detect Sulphate Reducing Bacteria Which is An Agent of Corrosion</b> Uma Devi Chandaran, Zaini Abdul Halim, O.Sidek, Darah,I, J.Mohamad-Salleh, N.Mohamad, Rashidah, A.R Universiti Sains Malaysia, Malaysia
82	<b>Identification of Linearized Regions of Non-Linear Transducers Responses</b> Abdulwahab Deji, Sheroz Khan, Zahirul Alam, A.W. Naji, Jalel Chebil, Musse Mohamud Ahmed International Islamic University Malaysia, Malaysia
170	<b>Design and Implementation of a Fuzzy logic based controller for refrigerating systems</b> Mahbubur Rashid, Muhammad Ashraful International Islamic University Malaysia, Malaysia
356	<b>PC Sound Card Based Instrumentation and Control</b> Teddy Surya Gunawan, Othman Khalifa International Islamic University Malaysia, Malaysia
363	<b>New Supervisory Control and Data Acquisition (SCADA) Based Fault Isolation System for Low Voltage Distribution Systems</b> Musse Mohamud Ahmed , International Islamic University Malaysia, Malaysia

**Technical Session 5A: Signal and Image Processing (SIP)**

Chairperson: Dr. Amir Akramin Shafie

**4:00-5:30 PM (Prince 1)**

ID	Title, Author(s) and affiliation
224	<b>Detecting Background Setting for Dynamic Scene</b> Thasprabu Ramasamy, Vijanth Sagayan Asirvadam, Patrick Sebastian Universiti Teknologi Petronas, Malaysia



## Technical Sessions

- 241 **English Digits Speech Recognition System Based on Hidden Markov Models**  
Ahmad Abu Shariah, Teddy Surya Gunawan, Othman Khalifa, Mohammad A. M. Abushariah  
International Islamic University Malaysia, Malaysia
- 256 **An Adapted Point Based Tracking for Vehicle Speed Estimation in Linear Spacing**  
Hasliza A Rahim @ Samsuddin, Usman Ullah Sheikh, R Badlishah Ahmad, Aini Syuhada Md Zain  
Universiti Malaysia Perlis, Malaysia
- 292 **Cyclostationary Feature Based Multiresolution Spectrum Sensing Approach for DVB-T and Wireless Microphone Signals**  
Bakhit Amine , Varun Jeoti, Alfateh M.Alhassan Mossa  
Universiti Teknologi Petronas, Malaysia
- 333 **A Comparison of Extended, Improved and Unscented Kalman Filtering for 3-D Radar Target Tracking**  
Mohamed Abdel-Rahman, El-Sayed El-Badawy, Adel Soleiman  
Alexandria Higher Institute Of Engineering & Technology (Aiet), Alexandria, Egypt, Egypt
- 369 **Robust Adaptive Frequency-Domain Equalization for DS-CDMA In Non-Gaussian Noise Channels**  
Lillian Yee Kiaw Wang, Heng Siong Lim, Alan Wee Chiat Tan  
Fist, Multimedia University, Malaysia
- 370 **Development of An Arabic Text-To-Speech System**  
Mustafa Zeki, Othman Khalifa and A.W. Naji  
International Islamic University Malaysia

### Technical Session 5B : Network Reliability and QoS (NRQ)

Chairperson: Dr. Kamaruzzaman Seman

4:00-5:30 PM (Prince 2)

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 37  | <b>IMS-Based NGN Functional Architecture for QoS Handling</b><br>Arash Dana, Sara Rizehbandi<br>Central Tehran Branch, Islamic Azad University, Iran   |
| 143 | <b>Receiving Opportunity Control Used Admission Control Scheme for Wireless Multi-Hop Networks</b><br>Atsushi Takahashi, Nobuyoshi Komuro, Shiro Sakata, Shigeo Shioda, Tutomu Murase,<br>Graduate School Of Advanced Integration Science, Chiba University, Japan |
| 260 | <b>Macro-Mobility Support For MIPv6 Networks</b><br>Omar Zakaria, Aisha Hassan A. H, Othman O. Khalifa, Loay Faisal<br>International Islamic University Malaysia, Malaysia   |
| 331 | <b>Improved Congestion Control in Shared Bottleneck Concurrent Transport</b><br>Mohamed Tekala ,<br>Almergib University, Libyan Arab Jamahiriya  |

## Technical Sessions

- 346 **Reliability Enhancement of Complex Networks Through Redundancy Scaling**  
Wajdi Al-Khateeb, Sufyan Al-Irhayim, Khalid Al-Khateeb  
International Islamic University Malaysia, Malaysia
- 373 **Design of Robust Protocol to Enhance QoS in Mobile IPV6 Environment**  
Loay Faisal Ibrahim Ahmed, Aisha-Hassan Hashim, Farhat Anwar, Omer Mahmoud, Omer Zakaria,  
International Islamic University Malaysia, Malaysia

### Technical Session 5C : Computer Networks and Security (CNS)

Chairperson: Dr. Sigit Puspito Wigati Jarot

4:00-5:30 PM (Prince 3)

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 252 | <b>Markov Model For Performance Estimation of Adaptive Channel Coding Schemes With Various Acknowledgement Strategies</b><br>Abd Rahim Mat Sidek, Ahmad Zuri Sha'ameri<br>Universiti Teknologi Malaysia, Malaysia   |
| 259 | <b>Matching Fingerprint Based on Area Under The Highest Peaks Curve</b><br>Ahmed B. Elmadani, Abul Rahman Ramli<br>Department of Computer Science Faculty of Science Sebha University, Libyan Arab Jamahiriya   |
| 262 | <b>Secure Data Communication using Blind Source Separation</b><br>Abdulbasit Negrat, Anil Kumar<br>The Higher Institute of Electronics, Beni-Waled, Libyan Arab Jamahiriya  |
| 357 | <b>A Secure Protocol using 6DP For Quantum Authentication and Hash Functions For Key Distribution (KDP-6DP)</b><br>Khalid A. S. Al-Khateeb, Muhammed Munther A. Majeed, Magdy M. Saeb, Mohamed R. Wahiddin<br>International Islamic University Malaysia, Malaysia |
| 359 | <b>Theoretical Analysis of a Double Stage Erbium-doped Fiber Amplifier</b><br>Khalid A. S. Al-Khateeb, M. A. Mohammed, A. W. Naji and H.F. H. Ibrahim<br>International Islamic University Malaysia, Malaysia  |
| 366 | <b>A New Method For Generating Cryptographically Strong Sequences of Pseudo Random Bits For Stream Cipher</b><br>Mohammed Abumuala, Othman Khalifa, Aisha Hashim<br>International Islamic University Malaysia, Malaysia   |

### Technical Session 5D : Satellite, Space and Wireless Communications (SSW)

Chairperson: Dr. Ahmad Fadzil Ismail

4:00-5:30 PM (Prince 4)

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 105 | <b>Performance Improvement of Pulsed OFDM UWB Systems Using ATF Coding</b><br>Ahmed El Sanhoury, Ahmed Hassan Mabrouk<br>International Islamic University Malaysia, Malaysia |

## Technical Sessions

- 129 **Wireless Physical Layer Security using Channel State Information**  
 Mohammad Tahir, Sigit P.W Jarot, M.U Siddiqui  
 International Islamic University Malaysia, Malaysia
- 234 **An Optimal Circular 16-QAM Modulation Technique for Wavelet And Fourier Based OFDM**  
 Khaizuran Abdullah, Ahmad Fadzil Ismail, Wahidah Hashim, Zahir M. Hussain  
 International Islamic University Malaysia, Malaysia
- 255 **Design and Simulation of Orthogonal Frequency Division Multiplexing Transceiver System using Differential Phase Shift Keying (DPSK) for Wireless Local Area Network**  
 Hasliza A Rahim @ Samsuddin, Fareq Abd Malek, R Badlishah Ahmad, Aini Syuhada Md Zain, Wan Nur Suryani Firuz Wan Ariffin,  
 Universiti Malaysia Perlis, Malaysia
- 258 **Implementation and Analysis of Integration GSM/GPRS modem in a TMS320VC6713 Digital Signal Processor for Vehicle Location**  
 Hasliza A Rahim @ Samsuddin, Usman Ullah Sheikh, R Badlishah Ahmad, Aini Syuhada Md Zain,  
 Universiti Malaysia Perlis, Malaysia
- 317 **Optimized Configurable Architecture of Modulation Techniques for SDR Applications**  
 Jignesh Oza, Yogesh Patel, Pratik Trivedi, Nilesh Ranpura, Zuber Patel, U. D. Dalal, Rachna Jani and Vijay S. R.  
 Sardar Vallabhbai National Institute Of Technology, Surat, Gujarat India

### Technical Session 5E : Data Mining and Database Applications (DBM)

Chairperson: Dr. Ahmed Zeki

4:00-5:30 PM (Ballroom A)

- | ID  | Title, Author(s) and affiliation  |
|-----|---|
| 282 | <b>Hybrid Generic Algorithm</b><br>Shaykh Monzur, Hayder Ali, M.A.L Razakfaizul Hadi, Ayman Abd El Saleh<br>Computer Engineering Program, School Of Engineering And Information Technology University Malaysia Sabah, 88999 Kota Kinabalu, Sabahmalaysia                            |
| 320 | <b>An Effective Algorithm for Mining Users Behaviors in Time-Periods</b><br>Farhad Siasar Djahantighi, Mohammad-Reza Feizi-Derakhshi , Mir Mohsen Pedram , Zohreh Alavi<br>Islamic Azad University Science And Research Branch, Iran  |
| 326 | <b>Medical, Healthcare, and Emergency Model: Mobile Web To Enhance Patients' Facilities</b><br>Shihab A. Hameed, Vladimir Miho<br>Faculty Of Engineering, International Islamic University Malaysia, Malaysia   |
| 327 | <b>Car Monitoring, Alerting And Tracking Model: Enhancement With Mobility And Database Facilities</b><br>Shihab A. Hameed, Othman Khalifa, Mohd Ershad, Fauzan Zahudi, Bassam Sheyaa, Waleed Asender<br>Faculty Of Engineering, International Islamic University Malaysia, Malaysia |

## Technical Sessions

- 328 **ICT To Serve Hajj: Analytical Study**  
Shihab A. Hameed ,  
Faculty Of Engineering, International Islamic University Malaysia, Malaysia
- 355 **Integrated Medical Emergency Model : An Interactive Web-Based Database**  
Shihab A. Hameed, A.H.M Zahirul Alam, Noor Hafiza Chek Noh, Nurhuda Salim  
International Islamic University Malaysia, Malaysia
- 347 **Software Engineer Islamic Ethics : An Interactive Web-Based Model**  
Shihab A. Hameed, Khalid Al-Khateeb, Zubayda Mutaz  
Faculty Of Engineering, International Islamic University Malaysia, Malaysia

### Technical Session 5F : Instrumentation and Control (INS)

Chairperson: Dr. Musse Mohamud Ahmed

4:00-5:30 PM (Ballroom B)

- | ID  | Title, Author(s) and affiliation   |
|-----|--|
| 18  | <b>Design and Development of a Heart Rate Measuring Device using Fingertip</b><br>Md. Abdul Kader, Md. Abu Sayed, M.M.A. Hashem, Rushdi Shams<br>Khulna University of Engineering & Technology (Kuet), Bangladesh  |
| 205 | <b>Recursive Linear Network Modeling for Predicting and Detecting Gas Leak of a Pipe</b><br>Afifi Md Akib, Nordin Saad, Vijanth Sagayan Asirvadam<br>Universiti Teknologi Petronas, Malaysia   |
| 261 | <b>Comparison of classic and fuzzy PID controller in distillation column control</b><br>Shahin Shahryari, Hassan Hashemipour, Gholamali Heydari , Shahbnam Behzadi<br>Kerman University, Iran  |
| 321 | <b>Design of Ultra Low Cost Cell Phone Based Embedded System for Irrigation</b><br>Vasif Ahmed, Siddarth Ladhake<br>Babasaheb Naik College Of Engg., Pusad (Maharashtra State), India  |
| 361 | <b>Autonomous Object Seeking Robot Based on FPGA and a Single Chip Microcontroller</b><br>Alauddin Al-Omary ,<br>University Of Bahrain, Iraq   |
| 367 | <b>Wireless Speed Adjustment in XMR Robot Using MATLAB</b><br>Maryam Banitalebi Dehkordi, Abolfazl Zaraki, Mohd Fauzi Bin Othman,<br>Shamsudin H.A. Amin<br>Utm, Malaysia  |
| 374 | <b>Electrical Cell-substrate Impedance Sensing (ECIS) based Biosensor for Characterization of DF-1 Cells</b><br>H.R. Siddiquei, A. N. Nordin, M. Mel, N.H. Sulong, M.I. Ibrahimy, M.A. Arifin,<br>I. Voiculescu<br>International Islamic University Malaysia, Malaysia |