

2008 International Symposium on High Capacity Optical Networks and Enabling Technologies

(HONET)

**Penang, Malaysia
18-20 November 2008**



**IEEE Catalog Number: CFP0805B-PRT
ISBN: 978-1-4244-2960-8**

| | |
|--|-----------|
| Emerging Technologies for Healthcare | 1 |
| <i>Mohammad Ilyas</i> | |
| Optical Communications, Internet2 and Global Reliance on Informatics | 5 |
| <i>Shaftab Ahmed, M. Yasin Akhtar Raja</i> | |
| Voice Transport Techniques over MPLS | 11 |
| <i>Junaid Ahmed Zubairi</i> | |
| Performance Evaluation of Wavelength Assignment and Collision Diminution for WDM switch | 16 |
| <i>Go Yun li</i> | |
| Integrating RLP and Fast Zero Algorithm to Improve Routing Performance in Optical Multistage Interconnection Networks | 20 |
| <i>Tengku Dian Shahida, Mohamed Othman, Mohamad Khazani</i> | |
| Links Lifetime Estimation Based on Nodes Affinity in Wireless Ad-hoc Networks | 25 |
| <i>Essam Natsheh , Tat-Chee Wan</i> | |
| Heuristic Surveillance of Targets in Sensor Networks | 32 |
| <i>Saeed Kamel, Akbar Ghaffar Pour Rahbar</i> | |
| Bandwidth Enhancement Technique using Series-Shunt Bootstrapping for Front-end Optical Wireless Receiver | 38 |
| <i>Arnidza Ramli, Siti Sara Rais, Sevia Mahdaliza Idrus, Abu Sahmah Mohd Supa'at</i> | |
| Anomaly-aware IP Scheduler with Admission Control for 802.11n Base Station | 43 |
| <i>Chun Yeow Yeoh</i> | |
| Utilizing Optical Burst Switching Networks for the Internet Real-Time Traffic | 49 |
| <i>Mohammed Al shargabi, Abdul Samad Ismail</i> | |
| Advance Reservation and Dynamic Scheduling of Point to Multipoint LightPaths | 55 |
| <i>Faraz Arshad, Sarfraz Rasheed Ramay, Savera Tanwir, Lina Battestilli, S.M.H Zaidi</i> | |
| Multimedia Communication: RSW Control Protocol and IAX | 61 |
| <i>Manjur kolhar, Abouabdalla Omar, Sureswaran Ramadass, Tat Chee Wan</i> | |
| QoS in Mode 0 of Bimodal Burst Switching | 66 |
| <i>Asim Shafique, Savera Tanwir, Kanwar Saad, S.M. Hassan Zaidi</i> | |
| MAC Layer Dynamic Backoff Scheme for Message Delivery Reliability in Wireless Sensor Networks | 72 |
| <i>Ahmed Badi, Imad Mahgoub, Mohammad Ilyas</i> | |
| Novel Scheme for Remote LO Delivery and Wavelength Reuse for Bidirectional Radio-over-Fiber Architecture | 77 |
| <i>Haider Raza, Syed Zaidi, M Ramzan, K Zaidi, Yasin Raja</i> | |

| | |
|--|------------|
| Simultaneous Noise Reduction and Linearity Improvement of Optical Feed-forward Transmitter for Radio over Fiber Systems..... | 83 |
| <i>Suryani Alifah, Sevia Mahdaliza Idrus, Norazan Kassim</i> | |
| Radio-Over-Fiber (RoF) Architecture Integrating Broadband Wireline and Wireless Services | 88 |
| <i>Waqas Ayub, M Ramzan, Syed Ali Haider, Syed Zaidi</i> | |
| HBT Optoelectronic Mixer Design for Radio over Fiber System | 93 |
| <i>Hilman Harun, Sevia Mahdaliza Idrus, Abu Bakar Mohammad, Norliza Mohamed</i> | |
| Millimeter-Wave Carrier Generation System for Radio over Fiber | 97 |
| <i>Norliza Mohamed, Hilman Harun, Sevia Mahdaliza Idrus, Abu Bakar Mohammad</i> | |
| Correction of Nonlinearity in High-Resolution Nano-Displacement Measurements | 102 |
| <i>Saeed Olyaei, Samaneh Hamedi</i> | |
| Geometrically Modified Multimode Interference Waveguides Using High Refractive Index SiON Material, for Application in Wavelength Multiplexing/Demultiplexing | 107 |
| <i>Mona Mayeh, Faramarz Farahi</i> | |
| High Precision Measurement Setup for the Spectral Gain of EDWA in a Low Signal Regime | 112 |
| <i>Muhammad Rameez Asif, Mustafa Ali Haithem, Muhammad Zafrullah</i> | |
| Usage Pattern Based Prefetching For Mechanical Mass Storage | 117 |
| <i>Sohail Sarwar, Yasir Mahmood, Farooq Ahmad, Raihan Ur Rasool, Takahashi Hironao</i> | |
| Analysis of Super-Gaussian Ultra-Short Pulse Propagation in Nonlinear Optical Fibers | 121 |
| <i>Ehsan Rahimi, Shahram Mohammad Nejad</i> | |
| Design of Photonic Crystal Fiber with Improved Dispersion and Confinement Loss Over All Telecommunication Bands | 127 |
| <i>Shahram Mohammad Nejad, Mohammad aliramezani, Maryam Pourmahyabadi</i> | |
| A Performance Analysis of Inter-Domain QoS Routing Schemes Based on Path Computation Elements | 132 |
| <i>Geza Geleji, Harry Perros, Yufeng Xin, Tsegereba Beyene</i> | |
| Performance Analysis of SER in DVB-H by using Reed-Solomon Code with Erasure and Non Erasure Technique | 139 |
| <i>Muhammad Irfan, Naveed Ahmed</i> | |
| SLAIS: SAGE-Lite Agent Information System | 144 |
| <i>Sana Khaliq, Farooq Ahmad, Amir Hayat</i> | |
| A Multi-Agent Based Replication Strategy for Improving Availability and Maintaining Consistency of Data in Large Scale Mobile Traffic Control Environments | 149 |
| <i>Ashraf Ahmed, Azween Abdullah, P.D.D. Dominic</i> | |

| | |
|---|------------|
| Cooperation of RNC Agents for SLA Based Radio Resource Management | 155 |
| <i>Bilal Rizvi, Sarmad Sadik, Farooq Ahmad, Hiroki Suguri</i> | |
| Current State of Sequential Cryptography and its Future Direction in Parallel System | 162 |
| <i>Azman Samsudin, Khaled Suwais</i> | |
| Bluetooth Security in Wearable Computing Applications | 168 |
| <i>Redjem Bouhenguel, Imad Mahgoub, Mohammad Ilyas</i> | |
| Biologically Inspired Model for Securing Hybrid Mobile Ad hoc Networks | 173 |
| <i>Yasir Abdelgadir Mohamed, Azween B. Abdullah</i> | |
| Protection of Multicast Traffic in WDM Mesh Networks | 178 |
| <i>Ameneh Daeinabi, Akbar Ghaffar Pour Rahbar, Wail Mardini</i> | |
| Enhancing the certificate service in Ad-hoc Networks | 184 |
| <i>Dat Nguyen, Ben Soh</i> | |
| Similarity Level Method Based Static Software Birthmarks | 191 |
| <i>Yasir Mahmood, Zeeshan Pervez, Sohail Sarwar, Hafiz Farooq Ahmed</i> | |
| A Prioritized Routing Algorithm for Multi-Domain Optical Networks Supporting Advance Reservation | 197 |
| <i>Chongyang Xie, Nasir Ghani</i> | |
| Link-Rate Assignment in a WDM Optical Mesh Network with Differential Link Capacities: A Network-Engineering Approach | 202 |
| <i>Marwan Batayneh, Dominic Schupke, Marco Hoffmann, Andreas Kirstaedter, Biswanath Mukherjee</i> | |
| Evaluation of LowDistortion Approximation Methods For Overlay Multicast Tree Construction | 206 |
| <i>Huan Luo, Khaled Harfoush</i> | |
| Improvements of using the WOMN System in Communication | 212 |
| <i>Wail Mardini, Mohammad G. Ali, Akbar Ghaffar Pour Rahbar, Yaser Khamayseh</i> | |
| Hybrid Multicast with Partial Network Support | 219 |
| <i>Huan Luo, Khaled Harfoush</i> | |
| Raman Amplified PON (RA-PON): Mitigating SRS using SRS | 226 |
| <i>Kavan Acharya, Yasin Raja</i> | |
| An Efficient PCS to Transmit FEC-Coded Frames in Ethernet PON | 231 |
| <i>Chih-Hsu Yen</i> | |
| Analyzing the RZ, NRZ and DB in a DCF and FBG Compensated Narrowband Short-haul Optical Link | 237 |
| <i>G.Gnanagurunathan, H.K.Dias</i> | |

| | |
|---|------------|
| Design and Modeling of Hybrid Waveguides with Quasi-Flat Transmission Band | 240 |
| <i>Kiazand Fasihi, Shahram Mohammad Nejad</i> | |
| Dark Current Reduction in ZnO-Based MSM Photo-detectors With Interfacial Thin Oxide Layer | 245 |
| <i>Shahram Mohammad Nejad, Shahin Enayati Maklavani, Ehsan Rahimi</i> | |
| Optimal Confinement Loss Reduction in Photonic Crystal Fiber with Ultra-Flattened Dispersion | 251 |
| <i>Maryam Pourmahyabadi, Shahram Mohammad Nejad</i> | |
| Identity Management System for Electronic Government Processes in Pakistan | 257 |
| <i>Dr. Amir Hayat (NUST Pakistan), Sohail Khan, Masoom Alam, Mohammad Nauman</i> | |