

2013 3rd IEEE International Conference on Computer, Control & Communication

(IC4 2013)

**Karachi, Pakistan
25 – 26 September 2013**



**IEEE Catalog Number: CFP1363F-POD
ISBN: 978-1-4673-5884-2**

Table of Contents

Session 1 (Session Chair: Dr Shahid Khattak)

Comparison and Improvement of PCA and LBP Efficiency for Face Recognition

Rameez Qasim, Mutsaied Shirazi, Naveel Arshad, Ikram Rasool Qureshi and Sajjad Zaidi

Investigating 3D Echocardiography Image Fusion for Improving Image Quality

Ammara Nasim, Aisha Gul Hafeez Hafeez, Kashif Rajpoot and Muhammad Shahzad Younis

Self-Image Formation and Variations in Multimode Interference Waveguides with Effects of Temperature Variation on Device Performance

Sundas Amin and Usman Younis

Image Classification and Retrieval based on Crisp and Fuzzy Ontology

Madiha Liaqat

Comparative Analysis of Classification Algorithms Performance for Statistical based Intrusion Detection System

Muhammad Junaid Muzammil, Sameer Qazi and Taha Ali

Session 2 (Session Chair: Dr. Usman Keerio)

Backstepping controller design Based on Similar Skew-Symmetric Structure

Yi Cheng Liu and Xin Yi Liu

Efficient Decision Making Technique For Industrial Machine Condition Monitoring

Saud Altaf, Sajid Mehmood, Ayesha Sharif and Syed Ali Raza

Control of a Magnetic Levitation System Using Non-Linear Robust Design Tools

Muhammad Ahsan, Nouman Masood and Fawad Wali

DC Motor Speed Control by Embedded PI Controller with Hardware-in-loop Simulation

Hamid Saeed Khan and Muhammad Bilal Kadri

Optimal Control Synthesis for UAV

Syed Asad Hussain and Muhammad Bilal Kadri

Performance Comparison of Two Altitude-Control Algorithms for a Fixed-Wing UAV

Mansoor Ahsan, Kamran Shafique, Atif Mansoor, Muddassar Mushtaq

Session 3 (Session Chair: Dr Shafaat Bazaaz)

Implementation and Performance Analysis of Blind Beamforming Algorithms on Adaptive Antenna Array

Muhammad Yasin and Pervez Akhtar

Compact Dual Band Microstrip Antenna Design Using Slits

Aqeela Saghir, Syed Muzahir Abbas, Usman Afzal, Tauseef Tauqeer and Muhammad Haroon Tariq

MIMO Antenna Array for Wireless Local Area Networks

Hamza Nawaz, Ilyas Saleem, Arslan Kiyani and S. Muzahir Abbas

Session 4 (Session Chair: Dr. Usman Keerio)

Multivariable Adaptive Fuzzy Logic Controller Design based on Genetic Algorithm applied to HVAC Systems

Muhammad Waqas Khan, Mohammad Ahmad Choudhry and Muhammad Zeeshan

An Interval Type-2 Fuzzy PD Controller for Ball and Beam System

Umar Farooq, Jason Gu and M. Usman Asad

Hierarchical Fuzzy Identification Using Gradient Descent and Recursive Least Square Method

Zeinab Fallah, Mojtaba Ahmadi Khanezar and Mohammad Teshnehlab

Session 5 (Session Chair: Dr Najmi G. Haider)

Impact of Router Buffer Size on TCP/UDP Performance

Syed Humair Ali, Syeda Areeba Nasir and Sameer Qazi

Analysis of Impact of Routing Buffer Size on TCP Variants

Sana Arif, Hamza Mansoor Many, Sameer Qazi

VQAPM: Voice Quality Assurance Protocol in MANET

Muhammad Aamir and Syed Mustafa Ali Zaidi

Discrete Binary Cat Swarm Optimization Algorithm

Yousef Sharafi, Mojtaba Ahmadih Khanesar and Mohammad Teshnehlab

Cross Layer Optimization of Dynamic Source Routing Protocol using IEEE 802.11e based Medium Awareness

Muhammad Asif Khan and Jalal Ahmad

Session 6 (Session Chair: Assistant Prof Riaz Mehmood)

Speaker Recognition System Using Mel-Frequency Cepstrum Coefficients, Linear Prediction Coding and Vector Quantization

Shahzadi Farah and Azra Shamim

Novel Algorithm for Analysis and Classification of Atrio- Ventricular Nodal Re-entry Tachycardia (AVNRT) Using IntraCardiac ElectroGrams

Hassan Shahzad, Shoaib Khan, Tahir Zaidi, Noman Razzaq, Abdullah Farid

Digital Calibration of Delta Sigma Modulator using Variable Step Size LMS based Adaptive Line Enhancer

Mubeen Tayyab, Awais Kamboh and Nasir Gohar

Spectral Estimation for Smart Antenna System

Umar Mujahid, J.A Mudassir Mukhtar, Abdul Rehman, Muhammad Abbas and Umair Shahid

Estimation of the Parameters of Wavelet Neural Networks Using Simultaneous Use of Genetic Algorithm and Recursive Least Square

Nooshin Rezaie, Mojtaba Ahmadih Khanesar and Mohammad Teshnehlab

Session 7 (Session Chair: Assistant Prof Riaz Mehmood)

Ground Plane Tunable Microstrip Antenna for Wireless Communications

Ilyas Saleem, Hamza Nawaz, M. Hassan Shabbir, S. Muzahir Abbas, Rana Liaqat Ali

Ultra Wideband Antenna with WLAN Band-Notch Characteristic

Zeeshan Ahmed, Gul Perwasha, Saleem Shahid, Hijab Zahra, Ilyas Saleem and S. Muzahir Abbas

Future of Satellite Broadband Internet Services and Comparison with Terrestrial Access Methods such as DSL and Cable modem

Muhammad Kaleem Iqbal

Joint and Marginal Probabilities for Time of Arrival and Angle of Arrival using Ellipsoidal Model

Muhammad Aslam and Aamir Shaikh

Session 8 (Session Chair: Prof Dr Najmi G. Haider)

Testing Web Application from Usability Perspective

M. Junaid Aamir, Arshad Mansoor

Restrictive Model (RM) for Detection and Prevention of INVITE Flooding Attack

Muhammad Asif Raza, Asim Rehman Khan and Muhammad Raza

Artificial Neural Network Based Electrocardiography Analyzer

Bushra Mehdi, Tahmina Khan and Zain Anwar Ali

Application of Image Processing Techniques for the Extraction of Vehicle Number Plates over ARM target Board

Muhammad Junaid Muzammil and Sajjad Zaidi

Session 9 (Session Chair: Assistant Prof Riaz Mehmood)

Design Options for DTMF detection using Goertzel Algorithm on Reconfigurable Fabric

Ali Arif, Hasan Musa Syed, Syed Ali Jabir

RAM Based Neural-Network Controlled Vehicle: Path-Tracking & Collision

Avoidance

Najmi G. Haider, Arif Karim

PAPR Optimization of SC-FDMA Signal Using M-ARY Signaling

Mohammad Irfan, Nasir Ahmad, Hurmat Ali Shah

Design of Multithreaded Real Time Embedded Video Acquisition System from IP Cameras

M Junaid Muzammil, Athar Mehboob

Session 10 (Session Chair: Dr Muhammad Bilal Kadri)

Type-2 Fuzzy Neural Networks for Sliding Mode Fuzzy Control of Nonlinear Dynamical Systems with Adaptive Learning Rate

Alireza Zarif Khoramdel Azad, Mojtaba Ahmadih Khanesar, Mohammad Teshnehlab

Parameter Identification of Takagi-Sugeno Fuzzy Model of Surge Tank System

Muhammad Saleheen Aftab and Dr. Bilal Kadri

Design of Fuzzy Logic Based Level Controller for Surge Tank System

Muhammad Saleheen Aftab and Dr. Bilal Kadri

A Novel washout Algorithm for ground vehicle

Muneer Usman