



EAI
The 2nd EAI International Conference on
Future Intelligent Vehicular Technologies



October 17-19, 2017
Hotel Margala, Islamabad, Pakistan

October 17, 2017 - TUESDAY

8:00am - 5:00pm: REGISTRATION (Hall A- TBA)

9:00am - 9:07am: Tilawat Kalam-e-Pak

9:07am - 9:15am: Conference Opening Remarks by

Fazlullah Khan, FUTURE5V CHAIR: Abdul Wali Khan University Mardan
(Location: Mian Hall)

9:15am - 9:30am: VC Speech/Conference Remarks by

Mr. Awais Rauf, Chief Executive Officer, The University of Lahore
(Location: Main Hall)

9:30am - 9:45am: VC Speech/Conference Remarks by

Prof. Dr. Khursheed Khan, VICE CHANCELLOR, Abdul Wali Khan University Mardan
(Location: Main Hall)

9:45am - 10:00am: Chief Guest Speech

Mr. ABC, Minister NA Pakistan
(Location: Main Hall)

10:05am - 11:00am: Keynote by **Dr. Rodhzia Binti Attan**

Professor, University of Malaya, Malaysia
(Location: Main Hall)

11:00am - 11:30am: **Tea Break**

PARALLEL SESSIONS :

A SESSIONS (Hall A)

SESSION TA1: Communication Networks I

CHAIR: **Dr. Khalid Hussain**, University of Lahore

Co-CHAIR: TBA

11:30 - 13:10

11:30 - 11:50 Energy Based Performance of AODV Routing Protocol Under TCP and UDP

11:50 - 12:10 Li-Fi Become IOE: A Novel Architecture for LED

12:10 - 12:30 Participant's Ranking Algorithm for Crowdsensing in Mobile Communication

12:30 - 12:50 A Parametric Performance Evaluation of Batteries in Wireless Sensor Network

12:50 - 01:10 Comparative Analysis and Route Optimization of State of the Art Routing Protocols

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION TA2: Delay Tolerant Networks I

CHAIR: **Dr. Wajahat Mahmood Qazi**, COMSATS Institute of Information Technology, Pakistan

Co-CHAIR: TBA

02:00 - 04:00

02:00 - 02:20 CC-RACE: Congestion Control with Reliability and Adaptive Cooperation for Efficient Underwater Sensor Networks

02:20 - 02:40 Design and Analysis of Compact Triple Band Microstrip Patch Antenna for Multiband Applications

02:40 - 03:00 Message Admission Control along with Buffer Space Advertisement to Control Congestion in Delay Tolerant Networks (DTNs)

03:00 - 03:20 Expert System for Handling Congestion in opportunistic Networks

03:20 - 03:40 Depth-based Adaptive and Energy-aware (DAE) Routing Scheme for UWSNs

03:40 - 04:00 State-of-the-Art Congestion Control Protocols in WSN: A Survey

04:00 pm - 04:30 pm: Tea Break

SESSION TA3: Software Engineering I

CHAIR: **Dr. Adnan Akhuzada**, COMSATS Institute of Information Technology, Pakistan

Co-CHAIR: TBA

- 04:30 - 06:30**
 04:30 - 04:50 A Research Framework OF Oracle Universal Content Management (UCM) An Impact on Enterprises/Organizations
- 04:50 - 05:10 Determining Interdependencies among NFRs in Agile Environment to Reduce Conflicts
- 05:10 - 05:30 Notational Modeling for Model Driven Cloud Computing using Unified Modeling Language
- 05:30 - 05:50 Offshore Outsourcing Risk Management for Pakistan
- 05:50 - 06:10 An Evolutionary Game-Based Mechanism for Unwanted Traffic Control
- 06:10 - 06:30 Distributed Monitoring Architecture for Industrial Safety Based on Gear Fault Diagnosis

B SESSIONS (Hall B)

SESSION TB1: Wireless Sensor Networks I

CHAIR: Dr. Sheeraz Ahmad, University of Lahore

Co-CHAIR: TBA

11:30 - 13:10

- 11:30 - 11:50 Geo-spatial division based geographic Routing for Interference avoidance in UWSN's
- 11:50 - 12:10 An Ontology based Approach for Messages Dissemination in Vehicular Ad Hoc Networks
- 12:10 - 12:30 Nodes density analysis for WBAN schemes in terms of Stability and Throughput
- 12:30 - 12:50 BER and NCMSE Estimation Algorithms for Underwater Noisy Channels
- 12:50 - 01:10 On Passive RFID Localization Systems in Internet of Things

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION TB2: Wireless Sensor Networks II

CHAIR: Dr. Shah Nazir, University of Swabi

Co-CHAIR: TBA

02:00 - 04:00

- 02:00 - 02:20 QL-EEDBG: QLearning based energy balanced routing in underwater sensor networks
- 02:20 - 02:40 DEAR-2 An Energy-aware Routing Protocol with guaranteed Delivery in Wireless Ad-hoc Networks
- 02:40 - 03:00 Scalability analysis of DBR and EEDBR in terms of delay, throughput and path loss in UASNs
- 03:00 - 03:20 A Novel Energy Aware Design for Clustered Wireless Sensor Networks
- 03:20 - 03:40 Energy Efficient Clustering Algorithm for Rechargeable Wireless Sensor Networks
- 03:40 - 04:00 Modeling Resource Allocation for Real time Traffic in Cognitive Radio Sensor Networks

04:00 pm - 04:30 pm: Tea Break

SESSION TB3: Internet of Things and Bigdata I

CHAIR: Dr. Jawad Ahmad, University of Lahore

Co-CHAIR: TBA

04:30 - 06:30

- 04:30 - 04:50 Internet of Things (IoTs) Research Challenges
- 04:50 - 05:10 Internet of Things based Smart City Environment using Big Data Analytics-A Survey
- 05:10 - 05:30 Cloud-assisted IoT-based smart respiratory monitoring system for asthma patients
- 05:30 - 05:50 Parallel Computation on Large Scale DNA Sequences
- 05:50 - 06:10 A Dynamic Distributive Internet of Things-Trust Management Mechanism Based Clustering (IoT-TM)
- 06:10 - 06:30

C SESSIONS (Hall C)

SESSION TC1: Underwater Sensor Networks I

CHAIR: Dr. Mian Ahmad Jan, Abdul Wali Khan Mardan

Co-CHAIR: TBA

11:30 - 13:10

- 11:30 - 11:50 A balanced energy consumption based routing protocol for efficient data gathering in underwater ASNs
- 11:50 - 12:10 Location error resistant Geo-opportunistic Routing for Void Hole avoidance in USN's

12:10 - 12:30 Adaptive Transmission based Geographic and Opportunistic Routing in UWSN.

12:30 - 12:50 Geographic and Enhanced Opportunistic Routing for UWSN

12:50 - 01:10

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION TC2: Image Processing I

CHAIR: **Dr. Maqsood Hayat**, Abdul Wali Khan University Mardan

Co-CHAIR: **TBA**

02:00 - 04:00

02:00 - 02:20 Segmentation of Chest Radiographs for Tuberculosis Screening Using Kernel Mapping and Graph Cuts

02:20 - 02:40 Blood cells counting and segmentation using Image Processing techniques

02:40 - 03:00 Survey Analysis of Automatic Detecting and Grading of Cataract using Different Imaging Modalities

03:00 - 03:20 Input Based Multiple Destination, Multiple Lines Following Robot with Obstacle Bypassing

03:20 - 03:40 Augmented and Virtual Reality in Mobile Fitness Applications: A Survey

03:40 - 04:00 Features Analysis of Online Shopping System Using WCM

02:00 pm - 04:00 pm: Tea Break

SESSION TC3: Healthcare and Assistive Technologies I

CHAIR: **Dr. Usman AKram**, National University of Sciences and Technology, Pakistan

Co-CHAIR: **TBA**

04:30 - 06:30

04:30 - 04:50 SmartAssist- Smartphone Based Drug Compliance for Elderly People and People with Special Needs

04:50 - 05:10 Improved Performance of Wavelet-SIFT Features Approach to Motion Detection by Mean of Matching Percentage

05:10 - 05:30 Fully automated identification of heart sounds for the analysis of cardiovascular pathology

05:30 - 05:50 A privacy risk assessment for the Internet of Things in Healthcare

05:50 - 06:10 Usability Attributes for Mobile Applications: A Systematic Review

06:10 - 06:30

October 18, 2017 - WEDNESDAY

8:00am - 01:00pm: REGISTRATION (Hall TBA)

9:00am - 10:00am: Keynote by **Dr. Nabeel Younus Khan**

Research Scientist, Volpara Solutions, New Zealand

(Location: Main Hall)

10:00am - 11:00am: Keynote by **Dr. Abid Yahya**

Professor, Botswana University, Botswana

(Location: Main Hall)

11:00 am - 11:30 am: Tea Break

PARALLEL SESSIONS :

A SESSIONS (Hall A)

SESSION WA1: Internet of Things and Bigdata II

CHAIR: **Dr. Nabeel Younus Khan**, Volpara Solutions New Zealand University of Lahore

Co-CHAIR: **TBA**

11:30 - 13:10

11:30 - 11:50 Exploring "IoT" Applications for Disaster Management: Identifying key factors and proposing future directions

11:50 - 12:10 A Review of Current Security Issues in Internet of Things

12:10 - 12:30 Spam User Detection through Deceptive Images in Big Data

12:30 - 12:50 A Review of Internet of Things (IoT) Connectivity Techniques

12:50 - 01:10 Bigdata and Named Entity Recognition Approaches

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION WA2: Information Security and Network I

CHAIR: **Dr. Muhammad Sajjad**, Islamia College Chartered University Peshawar

Co-CHAIR: **TBA**

02:00 - 04:00

02:00 - 02:20 EH-DBR: Energy Harvesting Depth Based Routing for UWSN's

02:20 - 02:40 A Survey of Key Negotiation and Authentication System in WSNs

02:40 - 03:00 Master Key Based Light Weight Key Negotiation Scheme for WSNs

03:00 - 03:20 Algorithm and Formal Model of Recovering Network Connectivity in Battlefield Surveillance

03:20 - 03:40 Enhancing Integrity technique using Distributed Query Operation

03:40 - 04:00 Big Data in Healthcare: A Survey

04:00 pm - 04:30 pm: Tea Break

B SESSIONS (Hall B)

SESSION WB1: Machine Learning and Artificial Intelligence I

CHAIR: **Dr. Rodziah bint Attan**, Malaysia

Co-CHAIR: **TBA**

11:30 - 13:10

11:30 - 11:50 Using Co-occurrence and Granulometry Features for Content Based Image Retrieval

11:50 - 12:10 Classification of Normal Heart beats using Spectral and non spectral features for phonocardiography signals

12:10 - 12:30 Intelligent Virtual Security System using Attention Mechanism

12:30 - 12:50 Quality Assessment and Classification of heart sounds using pcg signal

12:50 - 01:10 Machine Imagination: A Step Towards the Construction of Artistic World Through Storytelling

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION WB2: Information Systems and Internet Technology II

CHAIR: **Dr. Zahoor Jan**, Islamia College Chartered University Peshawar

Co-CHAIR: **Dr. TBA**

02:00 - 04:00

02:00 - 02:20 EH-ARCUN: Energy Harvesting Approach towards Reliability with Cooperation in UWSNs

02:20 - 02:40 Android based Vehicle Tracking System

02:40 - 03:00 Impact of Beacon Order and Superframe Order on IEEE 802.15.4 for Nodes Association in WBAN

03:00 - 03:20 Congestion aware and adaptive routing protocol for MANETs

03:20 - 03:40 A Comparative Study on Frequent Link Disconnection problems in VANETs

03:40 - 04:00 Performance and Execution Evaluation of VANETs Routing Protocols in different Scenarios

04:00 pm - 04:30 pm: Tea Break

C SESSIONS (Hall C)

SESSION WC1: Fog Computing I

CHAIR: **Dr. Abid Yahaya**, Botswana

Co-CHAIR: **TBA**

11:30 - 13:10

11:30 - 11:50 Seven Pillars to Achieve Energy Efficiency in High Performance Computing and Big Data: An Application Perspective of Fog Computing

11:50 - 12:10 Scheduling Algorithms for High performance Computing: An Application Perspective of Fog Computing

12:10 - 12:30 Internet Traffic Flow Analysis in Fog Computing: An Experimental Case Study

12:30 - 12:50 Secure Login Using Multi-Tier Authentication Schemes in Fog Computing

12:50 - 01:10 Managing and Processing Information in the Internet of Things based Smart City Environment using Big Data Analytics

01:10 pm - 02:00 pm: Lunch and Prayer Break

SESSION WC2: Machine Learning and Bigdata I

CHAIR: **Dr. Muazzam Ali Khan Khattak**, National University of Sciences and Technology, Pakistan

Co-CHAIR: **TBA**

02:00 - 04:00

02:00 - 02:20 A Tool for Knowledge-oriented Physics-based Motion Planning and Simulation

02:20 - 02:40 Modeling and Simulation of Resource constrained Vaccination Strategies and Epidemic outbreaks

02:40 - 03:00 An Overview of OCT Techniques for Detection of Ophthalmic Syndromes

03:00 - 03:20 Segmentation and Recognition of Electronic Components in Hand-Drawn Circuit Diagrams

03:20 - 03:40 Determination of Awareness of Piracy Level on Educational Institutions- A Questionnaire Based Study

03:40 - 04:00 Knowledge Extraction Using Web Usage Mining

02:00 pm - 04:00 pm: Tea Break

October 19, 2017 - THURSDAY

9:30am - 4:00pm: University visit