

TECHNICAL PROGRAM

2nd International Conference on Communication, Computing and Digital Systems (C-CODE 2019)

Date: 6 - 7 March 2019

Venue: Bahria University, Islamabad

DAY - 1 (6th March 2019)

Registration (08:00 - 09:30)

Opening Ceremony - Auditorium (09:30 - 10:30)

09:30	Recitation from the Holy Quran
09:35	Concept Note by Prof. Dr. M. Najam ul Islam Conference Chair & Dean Engineering Sciences, Bahria University
09:40	Welcome Address by Vice Admiral (R) Muhammad Shafiq Conference Patron & Rector, Bahria University
09:45	Keynote Speech by Prof. Dr. Jonathan Andrew Ware University of South Wales, UK
10:10	Address by the Guest of Honour
10:20	Address by the Chief Guest
10:30	Hi-Tea & Networking

Refreshments (10:30 - 11:00)

Technical Session A1 (Communication) - LT1

11:30	Invited Talk: 5G Networks: Research Opportunities and Challenges.
-	Dr. Shahid Khattak, Chairman Department of Electrical Engineering, COMSATS University, Abbottabad.
12:10	
12:15	Empirical Study of Variable BO and SO under different Performance Metrics in the IEEE 802.15.4
-	PID:260
12:30	Muhammad Yasir, Mhuammad Usman, Imran Khan, Ibrar Ali Shah and Fahimullah Khan
12:30	Multi band Frequency Reconfigurable Dielectric Resonator Antenna for Multiple wireless applications
-	PID:285
12:45	Shahid Khan, Hazrat Ali, Rizwan Khan, Safdar Nawaz Khan Marwat, Harry Ramenah and Camel Tanougast
12:45	Development of multi-user TDMA-based DSSS system
-	PID:84
13:00	Aneela Sajid, Aamir Habib, Saqib Ejaz and Saqib Ali

Technical Session B1 (Computing) - VCR

11:30		Invited Talk: Coordinating Software Development through Conflict Detection and Avoidance.
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12:10		Dr. Bakhtiar Khan Kasi, Dean Faculty of Information and Communication Technology, BUITEMS, Quetta.
12:15		A Comparative Analysis of Static Code Analysis Tools that check Java Code Adherence to Java Coding Standards
-	PID:56	
12:30		Rimsha Khan, Qirat Ashfaq and Sherish Farooq
12:30		Impact of Human-Centered Design Process (HCDP) on Software Development Process
-	PID:95	
12:45		Tayba Farooqui, Tauseef Rana and Fakeeha Jafari
12:45		Performance Analysis of Benchmarks for GPU-based Linear Programming Problem Solvers
-	PID:170	
13:00		Usman Ali Shah and Suhail Yousaf

Technical Session C1 (Digital Systems) - NC8

11:30		Invited Talk: Digital Building Solutions for Building Technologies
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12:10		Dr. Gerhard Zucker, CENTER of Sustainable Thermal Energy System, Austrian Institute of Technology (AIT), Austria.
12:15		Implementation of Automation medication dispensing system based on mobile robotic remote sensing unit
-	PID:4	
12:30		Asfandiar Ayub, Usama Bin Zahid and Jawad Mehmood Butt
12:30		Modeling, Simulation and Control of a Bio-Inspired Electromechanical Feather for Gust Mitigation in Flapping Wing UAV
-	PID:60	
12:45		S.H. Abbasi and A Mahmood
12:45		Automatic Cafe Management System Using Waiter Robot
-	PID:154	
13:00		Zahid Abbas, Shafqat Abbas, Saad Ahmed Khan, Aleena Mazhar and Mohsin Gulzar

Technical Session D1 (Information Security) - LT2

11:30		Invited Talk: State of the Art Open Source Tools for Pro-active, Re-active and Predictive Cyber Security
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12:10		Dr. Athar Mahboob, Vice Chancellor (Chief Executive), Khwaja Fareed University of Engineering & Information Technology, Rahim Yar Khan.
12:15		Cryptanalysis of Radio Frequency Identification System Mutual Authentication Protocol
-	PID:11	
12:30		Madiha Khalid, Umar Khokhar, Aniqah Tahir and Hyesung Park
12:30		Blockchain Framework for Retail Level Industry by Using a Supply chain Rules and Regulation
-	PID:24	
12:45		Rana M. Amir Latif, Samar Iqbal, Osama Rizwan, Syed Umair Aslam Shah, Dr. Muhammad Farhan and Farah Ijaz
12:45		FPGA based Out-of-Band Encryption Module with Key Management System
-	PID:139	
13:00		Adnan Shafiq, Safiullah Khan and Hamza Zuberi

Lunch - GYM (13:00 - 14:00)

Technical Session A2 (Communication) - LT1

14:00		Invited Talk: A practical view of IoT – from sensing to meaning
-		Dr. Jaime Lloret, Integrated Management Coastal Research Institute, Polytechnic University of Valencia, Spain.
14:40		
14:45		Li-Fi Based Health Monitoring System for Infants
-	PID:262	Hasnain Ali, M. Ibtehaj Ahmad and Anoshah Malik
15:00		
15:00		Energy-aware Routing in Internet of Things (IoT) Networks
-	PID:329	Shahzad Sarwar, Sammia Rauf, Rashid Rasheed and Laeeq Aslam
15:15		
15:15		Importance of Trickle Algorithm in IoT
-	PID:330	Shahzad Sarwar, Rashid Rasheed, Muhammad Abdullah Tariq and Laeeq Aslam
15:30		

Technical Session B2 (Computing) - VCR

14:00		Invited Talk: Blockchain – Applications beyond Bitcoin
-		Dr. Iftikhar Ahmad, Department of Computer Science & Information Technology, University of Engineering and Technology, Peshawar.
14:40		
14:45		Citation Context Analysis using Word-Graph
-	PID:146	Lubna Zafar, Usman Ahmed and Arshad Islam
15:00		
15:00		Search Results Diversification based on Subtopics Attention Network
-	PID:151	Adamu Garba, Shah Khalid, Shah Khusro and Irfan Ullah
15:15		
15:15		MCD: Mutually Connected Community Detection using clustering coefficient approach in social networks
-	PID:288	
15:30		Noman Tahir, Ali Hassan, Dr. Muhammad Asif and Shahbaz Ahmad

Technical Session C2 (Digital Systems) - NC8

14:00		Invited Talk: Design of a Digital Transmission System for Quantum Channels
-		Dr. Omar Usman Khan, Department of Computer Science, NUCES-FAST, Peshawar.
14:40		
14:45		A Sentence Speller Based on SSVEP Brain Computing Interface Using EEG
-	PID:182	Tarwan Kumar Khatri and Humera Farooq
15:00		
15:00		Hardware Optimization for Real-Time Target Tracking using Fast-Normalized Cross Correlation
-	PID:225	Omer Khan, Nayab Saeed, Raheel Muzzammel, Umair Tahir and Omar Azeem
15:15		
15:15		Design & Analysis of Asynchronous (Clockless) Circuits and Implementation using Mentor Graphics ASIC Design Tools
-	PID:238	
15:30		Muhammad Kamran Bhatti, Behlol Nawaz and Abdul Majeed Soomro

Technical Session D2 (Information Security) - LT2

14:00		Invited Talk: Technological advancement in IoT for a secure cyber world
-		Dr. Ghalib Asadullah Shah, Sultan Qaboos IT Chair, University of Engineering and Technology, Lahore.
14:40		
14:45		Conundrum-Pass: A New Graphical Password Approach
-	PID:229	Nida Asmat and Hafiz Syed Ahmed Qasim
15:00		
15:00		Symmetric-Key Multi-factor Biometric Authentication Scheme
-	PID:233	Jawad Iftikhar, Sajid Hussain, Khwaja Mansoor, Zeeshan Ali and Shehzad Ashraf Chaudhry
15:15		
15:15		Architectures for Security: A comparative analysis of hardware security features in Intel SGX and ARM TrustZone
-	PID:323	
15:30		Muhammad Asim Mukhtar, Muhammad Khurram Bhatti and Guy Gogniat

Refreshments (15:30 - 16:00)

Technical Session A3 (Communication) - LT1

16:00		Invited Talk: Research Trends in Internet of Things (IoT)
-		Dr. Shahzad Sarwar, Punjab University College of Information Technology (PUCIT), University of Punjab, Lahore.
16:40		
16:45		Fuzzy-Logic Based Localization for Mobile Sensor Networks
-	PID:213	Tanveer Ahmad, Xue Jun Li and Boon-Chong Seet
17:00		
17:00		Simulation Studies of Reconfigurable Communication Network for Southwest Offshore Wind Farm South Korea
-	PID:258	Shahid Hussain, Young-Chon Kim, Qaim Jan and Zakir Ali
17:15		
17:15		Towards Smart Utility Monitoring and Management
-	PID:307	Rajesh Kumar, Kuldeep Khatri, Muhammad Imran and Hasan Ali Khattak
17:30		

Technical Session B3 (Computing) - VCR

16:00		Invited Talk: Cloud Adoption: A Goal-Oriented Requirements Engineering Approach
-		Dr. Shehnila Zardari, Department of Computer Science & Software Engineering, NED University of Engineering & Technology, Karachi.
16:40		
16:45		Empirical Evaluation of Visual Graph Analytic Techniques
-	PID:25	Raiha Tallat, Rana M. Amir Latif, Dr. Muhammad Farhan, Ahmad Zaheer, Syed Umair Aslam Shah and Farah Ijaz
17:00		
17:00		Measuring Focus Quality in Color Space
-	PID:98	Bilal Ahmad, Husna Mutahira, Mikhail Li and Mannan Muhammad
17:15		
17:15		Story Based Video Retrieval using Deep Visual and Textual Information
-	PID:306	Muhammad Ahmed Hassan, Summra Saleem, Muhammad Zeeshan Khan and Muhammad Usman Ghani Khan
17:30		

Technical Session C3 (Digital Systems) - NC8

16:00		Assessing Performance of Convolutional Features for Terrain Classification Using Remote Sensing Data
-	PID:10	
16:15		Jawad Ahmed and Hasna Ahmed
16:15		Deforestation Analysis of Northern Areas (Pakistan) using Image Processing and Maximum Likelihood Supervised Classification
-	PID:116	
16:30		Abdul Rehman, Husnain Shahid, Azeem Sultan, Muhammad Abrar Afzal and Muhammad Owais Tahir
16:30		Effects of Image Resolution on Automatic Face Detection
-	PID:208	
16:45		Ossama Haneef, Sana Maqbool, Farhana Siddique, Zahid Mahmood, Shahid Khattak and Gul Zameen Khan
16:45		EEG based user authentication using visual stimuli of geometric shapes
-	PID:290	
17:00		Irfan Mustafa, Humera Farooq and Tarwan Khatri

GALA DINNER (19:30 - 21:30)

DAY - 2 (7th March 2019)

Technical Session A4 (Communication) - LT1

09:30		Invited Talk: Future trends of Wireless Sensor Network Applications in underwater communication
-		Dr. Bhawani Shankar Chowdhry, Former Dean, Faculty of Electrical, Electronics and Computer Engineering, Mehran University of Engineering & Technology, Jamshoro.
10:10		
10:15		Flexible Hardware Implementation of Universal Filtered Multi-Carrier Systems
-	PID:22	
10:30		Bahram Khan, Aasim Wakeel, Javaria Majid and Muhammad Mateen Shahbaz
10:30		Investigating a 28 GHz Wide-Band Antenna and its MIMO Configuration
-	PID:48	
10:45		Asma Ejaz, Sumrin Mehak, Wajeeh Anwer, Yasar Amin, Jonathon Loo and Hannu Tenhunen
10:45		Performance analysis of Amplify Quantize & Forward and Decode & Forward with Path loss effect in cooperative cognitive radio network using AWGN channel
-	PID:73	
11:00		Muhammad Ibrar, Salman Saleem and Imran Khan

Technical Session B4 (Computing) - VCR

09:30		Invited Talk: Online Advertisements under Internet censorship
-		Dr. Zartash Uzmi, Electrical Engineering and Computer Science, Lahore University of Management Sciences (LUMS), Lahore.
10:10		
10:15		A Smart Heart Beat Analytics System Using Wearable Device
-	PID:207	
10:30		Tayyaba Tariq, Rana M. Amir Latif, Dr. Muhammad Farhan, Adil Abbas and Farah Ijaz
10:30		Altitude Control of Quad-copter using Deterministic Policy Gradient Algorithms (DPGA)
-	PID:257	
10:45		Usama Hamayun Ghouri, Muhammad Usama Zafar, Salman Bari, Haroon Khan and Muhammad Umer Khan

Technical Session C4 (Digital Systems) - NC8

09:30		Invited Talk: Color Filter Array Demosaicking Methods in Frequency and Spatial Domain
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10:10		Dr. Gwanggil Jeon, Department of Embedded Systems Engineering, College of Information and Technology, Incheon National University, Korea.
10:15		Computer-assisted Acute Lymphoblastic Leukemia detection and diagnosis
-	PID:32	
10:30		Sarmad Shafique, Samabia Tehsin, Syed Anas and Farrukh Masud
10:30		A Novel Framework to Segment out Cervical Vertebrae
-	PID:45	
10:45		Faisal Rehman, S. I. A Shah, Omer Gilani, Emad Ud Deen, Naveed Riaz and Faiza Riaz
10:45		Fully automated detection, grading and 3D modeling of maculopathy from OCT volumes
-	PID:416	
11:00		Bilal Hassan and Taimur Hassan

Technical Session D3 (Information Security) - LT-2

09:30		Invited Talk: The Curious Case of Side-Channel Information Leakage
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10:10		Dr. Muhammad Khurram Bhatti, Electrical Engineering Department, Information Technology University (ITU), Lahore.
10:15		Security in Modern Smart Cities: An Information Technology Perspective
-	PID:314	
10:30		Tanzeela Jameel, Rukhsana Ali and Shumaila Farhan
10:30		Blockchain and IoT Based Disruption in Logistics
-	PID:200	
10:45		Huma Pervez and Irfan Ul Haq

Refreshments (11:00 - 11:30)

Technical Session A5 (Communication) - LT1

11:30		Invited Talk: Networked Vehicle Systems: From Vision to Reality
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12:10		Dr. Jose Carlos Queiros Pinto, Institute of Systems and Robotics, University of Porto, Portugal.
12:15		Communication Infrastructure for Stationary and Organized Distributed Smart Meters
-	PID:80	
12:30		Muhammad Hussain and Haroon Rasheed
12:30		Evolving Wireless Vehicular Communication (System level comparison and analysis of 802.11p, 4G & 5G)
-	PID:231	
12:45		Muhammad Naeem Tahir, Kari Mäenpää and Timo Sukuvaara
12:45		Design and Implementation of Smart Load Management (SLM) between Grid and Solar Generation
-	PID:237	
13:00		Wasim Iqbal, Rabbaya Akhtar and Syed Ali Raza Kazmi

Technical Session B5 (Computing) - VCR

11:30		Invited Talk: Deep Neural Networks Motivated by Partial Differential Equations
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12:10		Dr. Eridani M. Si, Airlangga University, Indonesia.
12:15		Human Body Parts Estimation and Detection for Physical Sports Movements
-	PID:77	
12:30		Ahmad Jalal, Amir Nadeem and Satoshi Bobasu
12:30		Person Detection by Fusion of Visible and Thermal Images Using Convolutional Neural Network
-	PID:252	
12:45		Bushra Khalid, Asad Mansoor Khan, Usman Akram and Sherin Batool
12:45		A Critical Review of Object Detection using Convolution Neural Network
-	PID:276	
13:00		Sehar Un Nisa and Muhammad Imran

Technical Session C5 (Digital Systems) - NC8

11:30		P300 Based Deception Detection using Convolutional Neural Network
-	PID:94	
11:45		Faryal Amber, Khurram Khurshid, Muhammad Imran and Adeel Yousaf
11:45		Automated Greenhouse System
-	PID:164	
12:00		Muhammad Raees Armughan Azhar, Muhammad Hamid, Muhammad Hamza Irfan, Muhammad Awais, Umar Shahbaz and Ayesha Zeb
12:00		FPGA Based Implementation of FIR Filter for FOFDM Waveform
-	PID:187	
12:15		Muhammad Mateen Shahbaz, Aasim Wakeel, Junaid Ur-Rehman and Bahram Khan

Technical Session A6 (Communication) - LT2

11:30		Invited Talk: 5G Hybrid Heterogeneous Networks: Opportunities and Research Challenges
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12:10		Dr. Syed Ali Hassan, Department of Electrical Engineering, School of Electrical Engineering and Computer Science (SEECS), NUST, Islamabad.
12:15		Model to Improve Scalability and Quality of Services in Software Defined Networking
-	PID:175	
12:30		Raza Hussain and Muhammad Umair Bashir
12:30		SIMCSO: Improvement of OWC link under snow attenuation
-	PID:176	
12:45		Zaibun Nisa, Mehwish Mansoor, Nadeem Shahzad, Fawad Javaid and Usman Ahmed
12:45		Orbital Angular Momentum Beams Generation by modifying Short Helical Antenna
-	PID:197	
13:00		Zagham Abbas Aqeel, Saima Gull, Shan Wenhui, Fan Di and Muhammad Asfar Saeed

Lunch - GYM (13:00 - 14:00)

Panel Discussion - VCR (14:00 - 15:00)

Closing Ceremony - Auditorium (15:30 - 16:40)

15:30	Keynote Speech by Prof. Dr. Kevin Z. Truman, Vice Provost & Dean, University of Missouri – Kansas City, USA
16:00	Concluding Remarks by Prof. Dr. M. Najam ul Islam Conference Chair & Dean Engineering Sciences, Bahria University
16:05	Vote of Thanks by Rear Admiral (R) Nasir Mahmood, Director General Bahria University, Islamabad Campus
16:10	Address by the Guest of Honour
16:20	Address by the Chief Guest
16:30	Distribution of Shields and Group Photo
16:40	Hi-Tea & Networking