# 2018 12th International Conference on Mathematics, **Actuarial Science, Computer Science and Statistics** (MACS 2018)

Karachi, Pakistan 24 – 25 November 2018



**IEEE Catalog Number: CFP18R50-POD ISBN:** 

978-1-7281-0416-4

## Copyright © 2018 by the Institute of Electrical and Electronics Engineers, Inc. All Rights Reserved

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.

 IEEE Catalog Number:
 CFP18R50-POD

 ISBN (Print-On-Demand):
 978-1-7281-0416-4

 ISBN (Online):
 978-1-7281-0415-7

#### **Additional Copies of This Publication Are Available From:**

Curran Associates, Inc 57 Morehouse Lane Red Hook, NY 12571 USA Phone: (845) 758-0400

Fax: (845) 758-2633

E-mail: curran@proceedings.com Web: www.proceedings.com



### TABLE OF CONTENTS

#### **TECHNICAL SESSION 1**

#### An Investigation of Hadoop Parameters in SDN-enabled Clusters

Hassan Tariq, Ian Welch & Harith Al-Sahaf, Victoria University of Wellington, Wellington, New Zealand.

#### A Tensorflow Based Neural Network to Predict Drone Strikes In Pakistan

Ushna Nafees, Komal Zahid, Shazia Parveen & Dr. Uzma Afzal, FUUAST, Karachi, Pakistan.

#### Survey on Indoor Positioning Applications based on different Technologies

Anum Hameed & Hafiza Anisa Ahmed, Jinnah University for Women, Karachi, Pakistan.

#### Virtual Reality in Multiplayer Carrom Game with Artificial Intelligence

Muhammad Zeerak Khan, Faizan Hassan, Muhammad Usman, Usman Ansari & Shaheena Noor, Sir Syed UET, Karachi, Pakistan

#### 2018 Pakistan General Election: Understanding the Predictive Power of Social Media

Maryam Bilal, Shainila Yousuf, Sundas Asif & Dr. Uzma Afzal, FUUAST, Karachi, Pakistan.

#### **TECHNICAL SESSION 2**

A Simulation Study on the Bounds of the Gini's Mean Difference for Data with a unit Standard Deviation Ishtiaq Ahmed & Tajuddin Islamuddin, IoBM, Karachi, Pakistan.

#### Seabed Logging Validation in a Lab Scale Setup for Hydrocarbon Exploration

Taha Shahzeb, Muahmmad Rauf, Abid Muhammad Khan, Syed Muahmamd Hamza Hashmi & Kashif Hussain Ansari, Sir Syed UET, Karachi, Pakistan.

#### **Model Assisted Regression Estimators for Estimating Population Total**

Naila Alam & Muhammad Hanif Kinnaird College for Women, Lahore, Pakistan; National College of Business Administration & Economics, Lahore, Pakistan.

## Non-Linear Associations Amongst the Oil Price, Gold Price and Stock Market Returns in Pakistan: A Vector Error Correction Model

Muhammad Faisal, Mushtaq Ahmad Khan Barakzai & Dr.S.M.Aqil Burney, IoBM, Karachi, Pakistan.

#### **Virtual Gaming**

Ummay Faseeha, Mahwish Naseem, Juwairiah Saleem, Ambreen Jahan & Naveera Jamil, Jinnah University for Women, Karachi, Pakistan.

#### **TECHNICAL SESSION 3**

#### LSB Modifiation based Audio Steganography using Advanced Encryption Standard (AES-256) Technique

Jibran Hashim, Arsalan Hameed, Muhammad Jamshed Abbas, Riphah International University Islamabad, Pakistan; Muhammad Awais, North China Electric Power University, Beijing, China & Sohail Abbas, International University Islamabad, Pakistan.

#### **Conflict Handling in Project Management: A Risk Assessment Analysis**

Hina Aziz & Sadaf Munir, NUST, Islamabad, Pakistan.

#### Location-free Voting System with the help of IOT Technology

Qasim Abbas, Tariq Ali, Hussnain Abbas, Sarah Javaid & Tanzeela Hussian, COMSATS, Islamabad, Pakistan.

#### Design of a Three Stage Operational Transconductance Amplifier in 90nm CMOS

Muhammad Usman, Muhammad Haseeb & Shabbir Majeed Chaudhry, UET, Taxila, Pakistan.

#### Deterministic Formal Modeling of Smart Lightening System using Internet of Things

Saba Latif, Hamra Afzaal, Aniga Rehman & Nazir Ahmad Zafar, COMSATS, Sahiwal, Pakistan.

#### Improving Requirement Engineering Process for Web Application Development

Syed Shafique Ali Bukhari, UIIT, Rawalpindi, Pakistan;, Mamoona Humayun, Jouf University, Al-Jouf, Saudi Arabia; Syed Asad Ali Shah, UIIT, Rawalpindi, Pakistan; & NZ Jhanjhi, Taylor's University, Selengor, Malaysia.

#### **Applications of IoT: Mobile Edge Computing Perspectives**

Urooj Yousuf Khan, SZABIST, Duabi, UAE; & Dr. Tariq Rahim Soomro, IoBM, Karachi, Pakistan.

#### **TECHNICAL SESSION 4**

#### A Study on Detection and Monitoring of Water Quality and Flow

Muhammad Bilal, Abdullah Ghani, Mohsen Marjani & Nadia Malik, COMSATS, Islamabad, Pakistan.

#### Comparative Analysis of Astrophysical Data by Different Nonlinear Regression Strategies

Kumar Attangudi Perichiappan Perichappan, Sriramakrishnan Chandrasekaran & Hayk Sargsyan, KPMG US, Roseland, NJ USA; National Academy of Sciences of Armenia, Yerevan, Armenia.

#### Improving Component Based Software Integration Testing Using Data Mining Technique

Sadia Ali, Muhammad Imran, Yaser Hafeez, Tehseen Riaz Abbasi, Wasi Haider & Abdul Salam, UIIT, Rawalpindi, Pakistan.

#### Trust Management Schemes for Secure Routing in VANETs – A Survey

Maryam Gillani, NUST, Rawalpindi, Pakistan; Ata Ullah, NUML, Islamabad, Pakistan; & Hafiz Adnan Niaz, NUST, Rawalpindi, Pakistan.

#### **Survey of Requirement Management Techniques for Safety Critical Systems**

Maryam Gillani, NUST, Rawalpindi, Pakistan; Ata Ullah, NUML, Islamabad, Pakistan; & Hafiz Adnan Niaz, NUST, Rawalpindi, Pakistan.

#### Non-Deterministic Formal Modeling of Registration System towards Smart Campus

Aniqa Rehman, Saba Latif & Nazir Ahmed Zafar, COMSATS, Sahiwal, Pakistan.

#### Optimized Numerical Investigation of Heat and Mass Transfer in Porous Media

Azeem Khan ,NZ Jhanjhi, Taylor's University, Selengor, Malaysia; & Mamoona Humayun, Jouf University, Al-Jouf, Saudi Arabia.