SHERMIN SHAMSUDHEEN
+966530699760 | sdheen@jazanu.edu.sa | Jazan University, Kingdom of Saudi Arabia
https://scholar.google.com/citations?hl=en&user=lI6ydEMAAAAJ

PROFILE

Highly competent computer science faculty with a proven track record of academic excellence in quality teaching and collaborative research. Highly motivated individual with presentation, research and communication skills. Profound understanding of Wireless Sensor Networks, Internet of Things,Neural Networks, Computer Networks and Security. Maintaining good morale in a multicultural working environment, and adaptability to be a part of a dynamic team.

EDUCATION

- PhD in Computer Science and Engineering (under the Faculty of Information and Communication Engineering), Anna University, Chennai, India,2017

- Master in Engineering in Computer Science and Engineering
  Vinayaka Missions University, Salem, India, 2007

- Associate Membership in Institution of Engineers (India) in Computer Science and Engineering
  Institution of Engineers (India), Kolkata, India,2005

AREA OF RESEARCH

- Internet of Things
- Wireless Sensor Networks
- Quantum Computing
- Machine Learning
- Mobile Communications
- Network Security
- Wireless communications

PUBLICATIONS

- "Edge Controller Based Deep Learning Framework for Data-Driven View in 5G Cellular Networks", International Journal of Network Enterprise Management, Inderscience Publishers, Vol.15, Issue 1, pp. 93-108,2024.
- "Metaheuristics with Deep Learning Model for Cyber Security and Android Malware Detection and Classification", Applied Sciences, MDPI, vol 13, Issue 4,2023.
- "Optimal Internet of Things based Improved Deep Learning Model for Medical Image Classification", Computers, Materials & Continua, vol. 73, no.2, pp. 2275–2291, 2022.
- "AI Bot to Detect Fake Covid-19 Vaccine Certificate", in IET Information Security, Volume 16, Issue 5,pp. 362-372,2022.
- "Secure and Energy-Efficient Computational Offloading Using LSTM in Mobile Edge Computing". Security and Communication Networks, Hindawi, Issue 1,2022.

- "A computing system that integrates deep learning and the internet of things for effective disease diagnosis in smart health care systems". Journal of Supercomputing, ,2022, Springer, 78,2022, 1573-0484.
- "Trust- and energy-aware cluster head selection in a UAV-based wireless sensor network using Fit-FCM". Journal of Supercomputing, Springer, 2021.
- "Improved Authentication and Computation of Medical Data Transmission in the Secure IoT using Hyper elliptic Curve Cryptography ", Journal of Supercomputing, Springer, 2021.
- "Attribute Balanced Leveling with Ada Boost Regressor for Predicting Heart Disease using Machine Learning". International Journal of Recent Technology and Engineering, vol. 8, no.5, January 2020, pp. 2488-2493.
- "Multilayer Neural Network-Based Fall Alert System Using IOT" , International Journal of MC Square Scientific Research, December 2019, vol. 11, No.4, pp 1-15.
- "Feature Scaled Element Balancing with Random Boosting for Heart Disease Prediction using Machine Learning", vol. 8, no.5, January 2020, pp. 4105-4110.

INTERNATIONAL CONFERENCE

- IoT Enabled & Blockchain based Secure Delivery Tracking System",1st International Conference on Logistics(ICL 2024),University of Jeddah.
- "IoT in emergency services: Architecture, Applications and Research Challenges",1st International Conference on Advanced Innovations in Smart Cities (ICAISC 2023) 23-25, January 2023 at Jeddah International College, Jeddah, Saudi Arabia.
- Support Vector Machine-based Handwritten Letters and Digits Recognition using Deep Learning, 5th Artificial Intelligence and Cloud Computing Conference (AICCC 2022), December 17-19, 2022, Japan.
- "An Application Framework for Blockchain on Smart Factory Locations using a Data Center Approach " in 7th International Congress on Information and Communication Technology, ICICT 2022- London.

BOOK CHAPTER

- Quantum computing applications in healthcare: revolutionizing diagnosis, treatment, and data security in Exploring Intelligent Healthcare with Quantum Computing, 165-180,2024.
- Neural rhythms: unveiling pathways to early detection in neurological disorders through wearable EEG analysis in Exploring Intelligent Healthcare with Quantum Computing, pp. 143-163.2024.
- "Sentimental Analysis of Social Context Using Integration of PSO-Cuckoo Optimization and SVM Classifier", in Artificial Intelligence & Blockchain in Cyber Physical Systems ,pp.143-171,2023.
- "Review-Real Time Smart Energy Meter and Load Automation Using IOT " in Advances in Computing, Electrical, Electronics, Mechanical and Communication Sectors, Central West Publishing, Australia.
- "Deep learning for Bioinformatics" in Applications of Machine Learning and Deep Learning on Biological Data, CRC Press, Taylor and Francis Group, *ISBN-13 978-1032214375.*

- COVID-19: Computer-Aided Diagnosis and Surveillance Control using Big Data and Deep Learning Methods" on Machine Intelligence in Medical Imaging: Theory and Practice, Bentham Science,2021(accepted).
- "Computer-Aided Diagnosis of liver fibrosis in hepatitis patients using Convolutional Neural Network", on Computational Analysis and understanding of Deep Learning for Medical Care: Principles, Methods, and Application, Scrivener Publishing, Wiley,2021, ISBN: 9781119785729

BOOK PUBLISHED

- Mastering Chat GPT: Fundamentals, Applications, and Ethical Considerations, Cosmas Publishers, India,2023.
- Wireless Sensor Networks and Security,2022, ISBN:978-93-94304-97-0, GCS publishers, India.
- "Review of Recent Trends in Biomedical Instrumentation", Scholar's Press,2020, ISBN-13:978-613-8-93500-1.

PATENT DETAILS

- Patient Remote Health Diagnosis Device, UK design Patent, Patent No.6307360,2023
- A Deep Neural Network based Intrusion Detection System by using Machine Learning Interfaces for a Cloud Environment, South African Patent no.2023/0325, Granted.
- Temperature Sensor, Indian Design patent no.373605-001,2023 and Granted.
- IoT Based Smart Wearable Suit for Self-Health Assessment in Post Covid Era, Patent No: 202141030202, Published in the Patent Journal.
- Design and Development of IoT-based Futuristic Mechanical Turbine for Enhanced Power Output, Patent No.202110383, and granted.
- Artificial Umpiring System Embedded in Cricket Stump, Patent No: 202141024729, Published in the Patent Journal, India.

PROFESSIONAL EXPERIENCE

- Lecturer in Department of Engineering and Computer Science — Sep 2012 – Present
  Jazan University, Saudi Arabia

- Associate Professor in Computer Science and Engineering — March 2012 - September 2012
  Musaliar College of Engineering and Technology
  Mahatma Gandhi University, Kerala, India

- Assistant Professor in Computer Science and Engineering — August 2010 - March 2012
  Musaliar College of Engineering and Technology
  Mahatma Gandhi University, Kerala, India

- Lecturer in Computer Science and Engineering — June 2007 - August 2010
  V.M.K.V Engineering College, Salem
  Vinayaka Missions University, India

ACHIEVEMENTS

- Obtained the second position in Qatar's Artificial Intelligence Competition Middle East & South Africa (MENA)Region for the submitted design and concept on "IoT-based Machine Learning Model Deployment for Wearable Device in Predicting Vitamin D Deficiency Level".
- Secured First Rank & Gold Medal for Master in Engineering.

TRAINING PROGRAMMES

- Attended an online training course entitled "From Idea to Market: A Journey towards Commercialization" conducted by the Deanship of Scientific Research, King Khalid University, Abha on July 9, 2020.

INVITED TALKS

- Presented a Talk on "Internet of Things in Health System" at the Women in Data Science Conference, KSA (WIDS 2022), held on March 5, 2022.

TECHNICAL TALKS

- Presented a seminar " 5G and its Impact on Internet of Things" seminar organized by the Department of Computer Science, Jazan University, February 2020.
- Presented a "Guidelines to Create a Citation Link" seminar organized by the Department of Computer Science, Jazan University, October 2019.
- Presented a seminar on "How to Write a Research Paper", organized by the Department of Computer
- Science and Information Technology, Jazan University, January 2018.
- Presented an "NS2 Simulator" seminar to students organized by the Department of Computer Science, Jazan University, January 2018.

MEMBERSHIPS

- Indian Society for Technical Education-Life Member (LM 66816)
- Institution of Engineers-Life Member (AM 129342-5)