

Dr. MIR YASIR UMAIR

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CAREER OBJECTIVE

Seeking a challenging role where my advanced knowledge and innovative mindset can contribute to the development and implementation of cutting-edge solutions in the industry. Eager to leverage my research background, technical proficiency, and passion for driving technological advancements. Committed to achieving excellence in research, design, and development while continuously expanding skills in a dynamic and collaborative professional environment.

EDUCATION

2011-2015	PhD Communication and Information Systems Beihang University (BUAA), Beijing, China
2008-2009	MS WIRELESS NETWORKS Queen Mary University of London (QMUL), London, UK
2003-2007	BS COMPUTER ENGINEERING Comsats Institute of Information Technology, Abbottabad, Pakistan
2001-2003	INTERMEDIATE Army Burn Hall College For Boys, Abbottabad, Pakistan

WORK and CONSULTANCY EXPERIENCE:

Associate Professor at Department of Electrical Engineering, College of Signals, National University of Sciences and Technology (NUST), from September 2022 till August 2025

Project Manager for the Development/Prototyping of Secure Digital Devices (DSC 1) for HSA Inc Dubai from 2023-Jan 2024

- Led a team of six professionals in the successful execution of a high-profile project focused on prototyping secure digital devices. The project aimed to enhance data security and improve user authentication for customized devices of the client.

Project Consultant with F3 Technologies for the Development of CRM for SkyPass Travels from September 2022 – Jan 2024

- Spearheaded the development and implementation of a comprehensive Customer Relationship Management (CRM) system tailored to the unique needs of the travel industry
- Collaborated with cross-functional teams, including software developers, UI/UX designers, and business analysts, to ensure the successful delivery of the CRM project within established timelines and budget constraints.
- Acted as the primary liaison between stakeholders and the development team, facilitating effective communication to gather requirements, provide project updates, and address concerns.
- Led project planning and execution to adapt to evolving business requirements and enhance project flexibility

Chief Consultant for the Development of Management & Attendance System (MAS) at POF Wah Cantt with MiGo Innovations Pvt Ltd from 2019 to 2020

- Led a dynamic development team in the successful design, implementation, and deployment of a comprehensive Attendance Management System, streamlining time-tracking processes and reducing administrative overhead.

Project Director for Network Operations Center (NOC) with CyberGen Inc US from 2020 to 2022

- Led and managed a dedicated team in Pakistan to run the Network Operations Center (NOC) in an offshore model.
- Oversaw the day-to-day operations of the NOC, ensuring 24/7 coverage and timely resolution of network issues to meet service level agreements (SLAs).
- Implemented and maintained robust processes and procedures for incident response, escalation, and resolution, optimizing efficiency and minimizing downtime.
- Collaborated closely with cross-functional teams, including onshore counterparts and client stakeholders, to align NOC activities with business objectives and deliverables.
- Successfully navigated challenges inherent to an offshore model, fostering effective communication, and ensuring seamless coordination between onshore and offshore teams.
- Conducted regular performance assessments, provided coaching and mentoring to team members, and facilitated professional development initiatives to enhance the skill set of the NOC team.

Assistant Professor at Department of Electrical Engineering, College of Signals, National University of Sciences and Technology (NUST), from March 2015 to September 2022

Lecturer at Department of Electrical Engineering, College of Signals, National University of Sciences and Technology (NUST), from April 2010 to March 2011

Engineering Associate , Beijing Jinkun Innovation Technologies Co. LTD, Beijing, China, from Aug2014 – Jan 2015

- Algorithm Planning
- Prototyping

Research Associate & Delegate, Huawei Beijing Research and Development Center. Beijing China, from March 2012- Aug 2014

- Platform development
- Positioning of UE in a HET-NET
- Handling the Resource Management and Scheduling issues during Handovers
- Patent Filing

Network Engineer at Hazara Communications (Pvt) Limited, Abbottabad, Pakistan from September 2007 To June 2008.

- Network Administration
- Routing and Rating (Call Managers).
- System Monitoring.
- Proxy Server Configuration. (Bandwidth Handling/Http Access)

PROJECTS SUPERVISED:

- Hawk Eye Security
- LUMEN - WIRELESS 3D AUDIO TRANSMISSION THROUGH BONE CONDUCTION
- Smart Sense Switch Board
- Smart Skin-put
- Quality Control System for Medicines using Image Processing
- High Performance OFDM Communication System
- Indoor Positioning System in WLAN Environment
- Development of Driver Aiding System
- Intelligent Parking System
- Indoor Localization Using Image Processing for Blind Personals
- Smart Automation for Home appliances for Disabled Personals
- Mobile ECG machine
- Smart IoT based Security Lock System for Public Homes
- Smart Helmet System – For navigation and Accident detection

ACHIEVEMENTS:

- **Awarded ‘The Best Teacher in College of Signals- NUST for Year 2016-17’**
- IEEE Branch Counselor College of Signals NUST from 2015 till Date.
- Awarded Merit Scholarship In All Semesters For Acquiring Position In Top 5 Of The F003-Bce Discipline By Comsats.
- Represented Comsats Electrical Engineering Department In Techno Moot 2007 Held At Comsats Abbottabad.

MEMBERSHIP:

- Pakistan Engineering Council Registered Engineer
- IEEE Professional Membership

JOURNAL PUBLICATIONS:

Chipless RFID Based Multi-Sensor Tag for Printed Electronics

Heliyon, vol. 10, no. 4, 2024, p. e26494. <https://doi.org/10.1016/j.heliyon.2024.e26494>.

Mechanism of double diffusive convection due to magnetized Williamson nanofluid flow in tapered asymmetric channel under the influence of peristaltic propulsion and radiative heat transfer

International Journal of Numerical Methods for Heat & Fluid Flow, 2024 34(2), 653–681.
<https://doi.org/10.1108/HFF-06-2023-0331>

Printed humidity sensor for low-cost item tagging,

AEU - International Journal of Electronics and Communications. ISSN 1434-8411,
<https://doi.org/10.1016/j.aeue.2022.154441>

Optimum power allocation for an energy harvesting wireless communication system considering energy storage losses,

ISSN 1570-8705, <https://doi.org/10.1016/j.adhoc.2023.103138>.

A novel searchable encryption scheme to reduce the access pattern leakage

March 2022, Future Generation Computer Systems, **Impact Factor: 7.187**

Double-diffusive convection on peristaltic flow of hyperbolic tangent nanofluid in non-uniform channel with induced magnetic field

Mathematical Methods in the Applied Sciences, 2022, Pages 1-18
<https://doi.org/10.1002/mma.8188>

Nanomaterials effects on induced magnetic field and double-diffusivity convection on peristaltic transport of Prandtl nanofluids in inclined asymmetric channel

Nanomaterials and Nanotechnology, Volume 12, Pages 1-10
<https://doi.org/10.1155/2021/2475846>

Partial Slip Impact on Double Diffusive Convection Flow of Magneto-Carreau Nanofluid through Inclined Peristaltic Asymmetric Channel

Mathematical Problems in Engineering, Volume 2021, Article ID 2475846, 14 pages
<https://doi.org/10.1177/18479804211048630>

"Efficient Prediction of Missed Clinical Appointment Using Machine Learning"

Computational and Mathematical Methods in Medicine, vol. 2021, Article ID 2376391, 10 pages, 2021. <https://doi.org/10.1155/2021/2376391>

"Double-diffusive convection with peristaltic wave in Sisko fluids along with inclined magnetic field and channel"

Waves in Random and Complex Media, Oct 2021
DOI: 10.1080/17455030.2021.1983238

Pharmacovigilance with Transformers: A Framework to Detect Adverse Drug Reactions Using BERT Fine-Tuned with FARM

Computational and Mathematical Methods in Medicine, vol. 2021, Article ID 5589829, 12 pages, 2021. <https://doi.org/10.1155/2021/5589829>

Enhanced Fingerprinting Based Indoor Positioning Using Machine Learning

CMC-Computers, Materials & Continua, 69(2), 1631–1652, 2021.
doi: 10.32604/cmc.2021.018205

Impact of partial slip and lateral walls on peristaltic transport of a couple stress fluid in a rectangular duct

Science Progress. Apr-Jun 2021;104(2) doi: 10.1177/00368504211013632

Double-diffusivity convection on Powell–Eyring nanofluids in non-uniform inclined channel under the impact of peristaltic propulsion and induced magnetic field

The European Physical Journal Plus volume 136, Article number: 494 (2021)

doi: <https://doi.org/10.1140/epjp/s13360-021-01506-9>

Position vectors based efficient indoor positioning system

Computers, Materials & Continua, vol. 67, no.2, pp. 1781–1799, 2021.

doi:10.32604/cmc.2021.015229

Less complex solutions for active noise control of impulsive noise

Journal of ‘Analog Integrated Circuits and Signal Processing’, 2019, pp1-15, ISSN 1573-1979 , Springer US, Paper DOI <https://doi.org/10.1007/s10470-019-01565-0>

CONFERENCE PUBLICATIONS:

Revolutionizing Data Center Networks: Dynamic Load Balancing via Floodlight in SDN Environment

2024 5th International Conference on Advancements in Computational Sciences (ICACS) 2024/2/19

Unsupervised Vessel Segmentation Technique Using LTP and PCA

March 2023 DOI:10.1109/ComTech57708.2023.10165082

Conference: 2023 International Conference on Communication Technologies (ComTech)

Unsupervised vessel segmentation method in retinal images

2022 International Conference on Frontiers of Information Technology (FIT), pp. 65-70, DOI: 10.1109/FIT57066.2022.00022.

A Modified Filtered-x LMAT Algorithm for Active Noise Control of Impulsive Noise

2019 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT) | Publisher: IEEE, DOI: 10.1109/ISSPIT47144.2019.9001759, **Electronic ISBN: 978-1-7281-5341-4**

LS algorithm for PAR Reduction in OFDM based Massive MIMO Broadcast systems

2019 IEEE International Symposium on Signal Processing and Information Technology (ISSPIT) | Publisher: IEEE DOI: 10.1109/ISSPIT47144.2019.9001789, **Electronic ISBN: 978-1-7281-5341-4**

Localization of a Mobile Node Using Fingerprinting in an Indoor Environment, 7th

International Conference on Communications, Signal Processing, and Systems – July 2018. c Springer Nature Singapore Pte Ltd. 2019

Q. Liang et al. (eds.), Communications, Signal Processing, and Systems, Lecture Notes in Electrical Engineering 516, https://doi.org/10.1007/978-981-13-6504-1_129

A robust multi-cue blending-based approach for floor detection, 13TH INTERNATIONAL BHURBAN CONFERENCE ON APPLIED SCIENCES AND TECHNOLOGY (IBCAST), 2016 Paper DOI: 10.1109/IBCAST.2016.7429948

Access Point Selection for Indoor Positioning in A WLAN Environment Using an Algorithm

Based on RSSI and Dilution of Precision", WIT TRANSACTIONS ON
ENGINEERING SCIENCES 2014, Paper DOI 10.2495/CCEEE140111

An Enhanced K-Nearest Neighbor Algorithm for Indoor Positioning Systems in a WLAN,
COMPUTING, COMMUNICATIONS AND IT APPLICATIONS CONFERENCE
(COMCOMAP), 2014, ISBN 978-1-4799-4811-6/14/

***Identification of interferers in Het-Net in LTE-A systems based on FeICIC with cell range
expansion,***
INTERNATIONAL CONFERENCE OF INFORMATION AND COMMUNICATION
TECHNOLOGY (ICoICT), 2013, pp 198 – 201, Paper DOI 10.1109/ICoICT.2013.6574573

Fundings:

By National Grassroots ICT Research Initiative – Ignite – for Year 2017-18 for the project titled “**SMART SENSE SWITCH BOARD**” – Project was selected among a variety of projects from at least 30 Universities nationwide.

By National Grassroots ICT Research Initiative – Ignite – for Year 2018-19 for the project titled “**Smart Helmet for Accident Detection and Reporting**” – Project was selected among a variety of projects from at least 50 Universities nationwide.

By National Grassroots ICT Research Initiative – Ignite – for Year 2020 for the project titled “**AVERROES**” – Project was selected among a variety of projects from at least 50 Universities nationwide

By National Grassroots ICT Research Initiative – Ignite – for Year 2020 for the project titled “**Bridget**” – Project was selected among a variety of projects from at least 50 Universities nationwide

By C&IT Branch – GHQ – Pakistan Army funded project – for Year 2019-20 for the project titled “Lumen – A hearing aid for wounded soldiers”