

Dr. Engr. Muhammad Mohsin Khan



Present Address

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Objective: To contribute in the growth and vision of a dynamic organization while utilizing my potential for achieving excellence, enhancing my technical and managerial skills.

Experience

(A) PAF- IAST, Sino-Pak Center for Artificial Intelligence March 2022- Till Date

After completion my post doctorate I have recently joined Sino-Pak Center for Artificial Intelligence (SPCAI), Pak-Austria Fachhochschule: Institute of Applied Sciences and Technology (PAF-IAST) as an Assistant Professor.

(B) International Islamic University, Islamabad (IIUI) Oct 07 – March 2022

Department of Electronic Engineering is the 1st department of the Faculty of Engineering and Technology at International Islamic University Islamabad (IIUI). I am the pioneer member of our departmental faculty, joined IIU in 2007. I have worked at IIUI in various capacities, details of which are given below:

1. Lecturer (2016 – March 2020): I have taught the following courses at the Undergraduate level and graduate level:

- Research Methodology
- Advance Digital Image Processing
- Advance topics on Biomedical Engineering
- Instrumentation & measurement
- Basic Electronic Engineering
- Linear Algebra
- Communication System
- Calculus I
- Fundamentals of Programing

- Embed systems
3. **Lab Engineer / Junior Lecturer (October 2007-Feb 2016):** I have start my career working as a Lab Engineer / Junior Lecturer at the Department of Electronic Engineering, International Islamic University Islamabad, Pakistan.
 4. **Lab Incharge:** I have developed various labs in the Department of Electronic Engineering at International Islamic University, Islamabad, especially that include Control System Lab, Instrumentation & Measurement Lab and Communication system Lab. Maintaining the laboratory Inventory and proper management of lab's staff is also part of my duty in IIU Islamabad
 5. **Laboratories Taught:** My job also include to instruct labs. I conducted the following labs at the Undergraduate:
 - Instrumentation & Measurement Lab
 - Basic Electrical Engineering Lab
 - Digital Signal Processing Lab
 - Communication system Lab I
 - Communication System Lab II
 - Basic Electronics Lab
 - Digital Logic Design Lab
 - Control system Lab
 - Signals & Systems Lab
 - FPGA Lab and
 - Computer Networks Lab
 6. **Program Coordinator:** I have been working as Program Coordinator at Department of Electronic Engineering in year 2007- 2009
 7. **Student Activity:** In-charge student activities at the Faculty of Engineering & Technology in year 2010 – 11
 8. **PGSRET Workshop:** Member of the workshop organizing committee of Power Generation Systems and Renewable Energy Technologies at International Islamic University Islamabad in year November 2010.
 9. **Annual Engineering Open house:** Member of the organizing committee of annual engineering open house of the University for Last five years.

(B) Internship:

- 1). 03 months of internship on networks & systems in Hazara Telecom Abbottabad.
- 2). Internship of 03 months at NRTC (National Radio Telecommunication Corporation) Haripur Worked on following projects Digital Switching in PABX,

Production/Alignment and Testing of VHF Frequency Hopping Radio Set, Research and Development Department.

Education

December 2019- Sep 2021	Post - Doctorate Biomedical Imaging Yale University USA.
2018	PhD (Electronic Engineering) Biomedical Imaging International Islamic University, Islamabad, Pakistan. *Research: Queen Marry University London, UK .
2011	MS Electronic Engineering Signal & Image processing International Islamic University, Islamabad, Pakistan.
2007	BS Computer Engineering Comsats Institute of Information Technology Abbottabad, Pakistan.
2003	Higher Secondary School Certificate Pre-Engineering Govt. Collage Mandian Abbottabad, Pakistan.

PhD Thesis

Efficient Computer Diagnostic System for Early Detection of Cancer

Areas of Specialization

- Medical Image Processing.
- Signal Processing.
- Digital Logic Design.

Training / Work Shops

- Master Trainer Faculty Professional Development Program
8 Jan – 28 Feb 2018, HEC Islamabad Pakistan
- Outcome based Education Pakistan Engineering Council, 3-4th December 2017

Research Grants

HEC/R&D/RGA/NRPU/2021/20299 (4.5 Million)

Automated Detection of Acute Ischemic Infarct on “Code Stroke” Head CT using Deep Neural Networks

Research Articles

Title	Journal	Year	Status	Impact Factor	ISSN No
Three Class Mammogram Classification Based On Descriptive CNN Features.	BioMed research international	2017	Published	2.15	2314-6141
Classification Of Mammograms for Breast Cancer Detection Based on Curvelet Transform and Multi-Layer Perceptron.	Biomedical Research	2017	Published	.219	0970-938X
Trimmed Mean Autoregressive Model For Reduction Of Poisson Noise In Scintigraphic Images	<i>IJUM ENGINEERING JOURNAL</i>	2018	Published	ISI Index	1511-788X
Beam Pattern Synthesis For An FDA Radar With Hamming Window-Based Nonuniform Frequency Offset.	IEEE Letters	2017	Published	2.53	1536-1225
Hash-MAC-DSDV: Mutual Authentication for Intelligent IoT-Based Cyber-Physical Systems	IEEE Internet of Things Journal	2021	Published	9.936	2337-4662
“Efficient Lung Segmentation and Fusion of CT Images to Improve	PlosONE	2021	Accepted	2.7	192-6203

Computational Efficiency,”					
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Conference Articles

- Novel mammograms classification for breast cancer detection based on multi-layer perceptron
IUH M. Mohsin Khan, Q. Zhang, S. Butt
Proceedings of the 4th ICAC, Birmingham, UK, 2016.
- DWT and Descriptive Features based Mammogram Classification for Breast Cancer Detection
M. Mohsin Khan, Rizwan Sadiq, Ihsan ul Haq
Proceedings of the (ICAIE), FIRAT Uni Turkey, 2017.

Professional Skills

- MATLAB
- Python
- C++
- Win pro ladder (PLC)
- Auto Cad 2000
- Pic Microcontroller Programming

Professional Affiliations

- HEC Certified Master Trainer.
- Member as a “Professional Engineer” (Comp / 4436) of Pakistan Engineering Council.
- CISCO Certified Network Associate

References

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