Dr. Muhammad Kamran

CONTACT

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EDUCATION & QUALIFICATIONS

PhD (CS)	***2017-2022, NED University of Engineering & Technology, CGPA 3.85.***
MCIT	*2013 - 2015, NED University of Engineering & Technology,* ***CGPA 3.56.***
BSCS	*2007 - 2010, UBIT University of Karachi,* ***CGPA 3.64 (2nd Position).***

PROFESSIONAL CERTIFICATIONS:

Effective PhD Supervision	*NED University of Engineering & Technology.*
Faculty Development Program	*NED University of Engineering & Technology.*
Web Engineering	*NED University of Engineering & Technology.*
Programmable Logical Control	*NED University of Engineering & Technology.*
Wind Turbine	*HAMDARD University.*

TECHNICAL SUMMARY:

ASSEMBLY, C, C++, C#, ARDUINO & PYTHON, MATLAB.

BS FINAL YEAR PROJECT:

IoT – Home Automation system

MS FINAL YEAR PROJECT:

IoT - 3 Phase wireless electricity monitoring system using GPRS.

PhD RESEARCH TOPIC:

Practical Quantum Key Distribution based on Higher Dimension protocol.

PROFESSIONAL PROJECTS:

- *Data Acquisition System for Solar Panels Using NI-DAQ Cards (For R&D Organization).*
- *Optical Quantum Random Number Generator.*

ORGANIZATIONAL EXPERIENCE:

Organization: R & D ***January 24th, 2006 – May 24th 2021.***

TEACHING EXPERIENCE:

CS & IT Dept. of NED University of Engineering & Technology

Assistant Professor (Adhoc)	***27th Oct, 2021- Present***
Lecturer (Regular)	***1st July, 2022- 26th Oct, 2022***
Lecturer (Contract)	***25th May, 2021- 30th June, 2022***

ACHIEVEMENT:

Best Performance awards for consecutive two years ***2007 & 2008****.*
Annual Excellence awards for the years ***2012 & 2014****.*
Distinguished Service award for the year ***2018****.*

ACADEMIC STAGE:

Training (of 3 weeks related to Quantum State Reconstruction) at INRIM, Turin, Italy ***Nov' 2023****.*

PUBLICATION & POSTERS:

1. ***Zafar, Roohi, Muhammad Kamran, Tahir Malik, Kashish Karera, Muhammad Humayon, Ghulam Mustafa, and Muhammad Mubashir Khan. "Randomness from radiation: evaluation and analysis of radiation-based random number generators." The European Physical Journal Plus 140, no. 5 (2025): 1-11.***
2. ***Kamran, Muhammad, Muhammad Mubashir Khan, and Tahir Malik. "Induced turbulence in the quantum channel of high dimensional QKD system using structured light." Applied Physics B 130, no. 4 (2024): 56.***
3. ***Kamran, Muhammad, Muhammad Mubashir Khan, and Tahir Malik. "Decoy state hd qkd system for secure optical communication." In 2021 International Conference on Cyber Warfare and Security (ICCWS), pp. 87-92. IEEE, 2021.***
4. ***Kamran, Muhammad, Tahir Malik, and Muhammad Mubashir Khan. "Evaluation of eavesdropping error-rates in higher-dimensional QKD system implemented using dynamic spatial modes." International Journal of Quantum Information 19, no. 06 (2021): 2150030.***
5. ***Kamran, Muhammad, DR KHAN, Tahir Malik, and Asad Arfeen. "Quantum key distribution over free space optic (FSO) channel using higher order Gaussian beam spatial modes." Turkish Journal of Electrical Engineering and Computer Sciences 28, no. 6 (2020): 3335-3351.***
6. ***Kamran M, Khan M.M. & Malik T. "High Dimensional Quantum Key Distribution System Using Structured Light" (Poster accepted in Qcrypt2021).***

FUNDINGS ACHIEVED:

- *Co-PI in Centre for Quantum Technologies at CSIT, NED-UET in 2024 till present.*
- *Sindh Research Support Program funding in 2022-2024. (Co-PI)*
- *MoST funding and HEC funding through NED UET in 2020-2022. (PhD Scholar)*

INTEREST:

- *Quantum Cryptography / Quantum Communication / Quantum Computation.*
- *Quantum Optics / Quantum Mechanics.*
- *Quantum Experimentalist.*