DR. MUHAMMAD KAMRAN KHAN

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Objectives

Pursuing my career as teaching profession to use my strong passion for promoting science and technology in the youth of the country with the skills and experience that will enable me to make a significant difference in promoting education

Personal Statement

I believe that my skills in Electronics and Computer Science related technologies can be very beneficial to the community. I have found myself to be very spirited and motivated while working in a Teaching Profession during the last 20 years that include, but not limited to, strong knowledge of organizational, educational, and public sectors teaching Experience with responsibility of creating, conducting and grading courses and exams. I always look forward to join team where I can get a chance to build and expand Education Cloud.

Education

PhD in Electronics
University of Peshawar
MS Computer Science (Telecommunication)
Gandhara University, Peshawar, PK
MSc Electronics
University of Peshawar
BSc Electronics
Gomal University

Professional Experience

- Assistant Professor (19/12/2011 till date) Department of Electronics, www.uop.edu.pk
 Deeply involved in both teaching and Research activities. Working with multiple research groups.
 (Published 12 Research articles in reputed journal and 6 conference papers)
 Teaching different courses to the students of BS, M.Phil. and Ph.D. programs in Electronics including the subjects of Power Electronics, Industrial Electronics, Digital Logic Design, Microprocessor and Microcontroller Design, CAD (Computer Aided Design)
- 2. Lecturer (01/03/2000 to 18/11/2011) Department of Electronics, www.uop.edu.pk
 Responsible for Teaching courses to BS and M.Sc. Programs in Electronics, including the subjects of Industrial Electronics, Digital Logic Design, Microprocessor and Microcontroller Design, CAD (Computer Aided Design)

3. Lecturer (01/09/1999 to 29/02/2000), D-CIT (Private Computer Training Institute)
Teaching an extensive course of Computer Hardware to the Engineering students and computer professionals

Administrative Experience

 Coordinator (Electronics Wing), Institute of Physics and Electronics, University of Peshawar (From 25/08/2009 to 28/08/2014) Six Years – www.uop.edu.pk
 Performed all the responsibilities of the Head of Department

Projects completed for Government sector (0.8 Million, Funded by KP Government)

Completed two research projects, funded by DoST (Directorate of Science & Technology, Government of Khyber Pakhtunkhwa, Peshawar

- 1. Wireless controlled Traffic Light System
- 2. Digital Energy Metering System with Wireless Readout

Book Chapters Published

Book Title: Wireless and Satellite Systems, **Publisher:** Springer International Publishing **Chapter Title:** Intelligent Dynamic Timeout for Efficient Flow Table Management in Software Defined Satellite Network, S Jan, Qing Guo, Min Jia, and Muhammad Kamran Khan, DOI 978-3-030-19153-5 6, © 2019

Research Publications

- 1. Shafiullah Khan, **M. Kamran**, Obaid Ur Rehman, Lei Liu & Shiyou Yang (2017) A modified PSO algorithm with dynamic parameters for solving complex engineering design problem, International Journal of Computer Mathematics, (*Impact Factor: 1.1*)
- 2. Noor Gul1, Ijaz Mansoor Qureshi, Sadiq Akbar, **Muhammad Kamran**, and Imtiaz Rasool, "One-to-many relationship based Kullback Leibler divergence against malicious users in cooperative spectrum sensing," Wireless Comm. and Mobile Computing, (*Impact Factor: 0.91*)
- 3. F. A. Khalil, S. Anwar, M. Asif, N. Ahmad, **M. Kamran**, and A. Khan, "Energy Management Strategy for Integrating Photovoltaic Energy in AC.", (*Impact Factor: 1.337*)
- 4. Analysis of solar maximum power point tracking algorithms and hardware architectures, M. ASIF, S. HAQ, M. ARSHAD, T. JAN, N. AHMAD, M. KAMRAN, M. ZUBAIR
- 5. S. Ahmad, S. Ahmad, M. Kamran, Electronic Information Resource Sharing among the Research Scholars: A case of University of Peshawar
- 6. S. Latif, **M. Kamran**, Wasim-ud-Din, R. Ullah, and A. B. Nouman, "Security enhancement of FHSS transmission system using hopping sequence and its compliment (CHS-FHSS)," World Appl. Sci. J., vol. 21, no. 6, pp. 920–926, 2013.

- 7. anees, hasmat, azaam, **kamran M.,** Absorption properties and I-V Characterization of Dye Sensitized Solar Cell Using Ruthenium Dye
- 8. Burhanullah, Aurangzeb Khan, Khairullah Khan, **Muhammad Kamran**, "Applied Computational Intelligence and Soft Computing Big Data and Hadoop: A Review," vol. XX, no. June, 2017.
- 9. S. Latif, **M. Kamran**, F. Masoud, and M. Sohaib, "Improving DSSS transmission security using Barker code along binary compliments (CBC12-DSSS)," Proc. 2012 ieee Int. Conf. Emerg. Technol. ICET 2012, pp. 254–258, 2012.
- 10. Ahmad, A., Anderson, T.N., Swain, A.K. and **Kamran, M.**, 2018, "Active Demand side management of a grid connected photovoltaic energy system using optimal control", Proceedings of DIT eseia Conference on Smart Energy Systems in Cities and Regions, Dublin, April 2018
- 11. W. Ullah, G. Ahmad, and M. Kamran, "A Cost Efficient DC-DC Converter for Wireless Sensor Node," 2018.

Membership of scientific socities

- 1. Member of IEEE
- 2. Member of ACM
- 3. Life time member of Khwarizmi Science Society, https://www.khwarizmi.org/

Other Projects

- 1. Design of a complete system for monitoring vital signs and communicating data to the cloud
- 2. Design of Electronic Load Controller (ELC) for Micro Hydro Power Generator
- 3. Design and implementation of computer network using power line communication
- 4. PLC and SCADA based industrial control system
- 5. IoT based car parking lots management system

Courses and Training

- 1. Virtual Instruments using NI Labview (RIMS, Islamabad)
- 2. Industrial Monitoring and Control (RIMS, Islamabad)

Professional Electronic Skills

- 1. **P**rogrammable Logic Controller (PLC) Hardware Design and Programming Worked on Siemens, Panasonic, Fatek PLC, also provided training to engineering students
- 2. **F**PGA Hardware design and Verilog programming Worked on Xilinx PLCs, Spartan 3e

- 3. **W**ireless Sensors Network
 Programming and simulation of hardware sensors nodes, Telosb Motes, Contiki and TinyOS
- 4. **E**xtensive Electronic Circuits Simulation on world top software Proteus, Multisim, MATLAB / Simulink
- 5. **P**rinted Circuit Boards (PCB) Designing Protel DXP, OrCAD, Eagle Soft

Tools and Computer Technologies

Electronic Software: Multisim, OrCAD, Altium Designer (Protel), Proteus, PSIM

Simulation Tools: MATLAB / Simulink, Labview
Research Software Tools: Mendeley, EndNote, Origin Pro
Programming Languages: C++, Visual Basic, Android Studio
Operating Systems: Windows 2010, Android, Linux

Application Tools: Microsoft Office 2013, VMware, Virtual Machine

Editor and Reports: MS OFFICE 2010, MS Project 2010, MS Visio 2010.

Distinctions:

1. Got first position in MS Computer science

References:

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 Sarhad University, Peshawar
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2. Dr. Imtiaz Rasool
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