

Curriculum Vitae

PERSONAL INFORMATION MEHRAN MUHAMMAD MEMON



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Pakistan Engineering Council (PEC) registration #

ELECTRO-18145

Sex Male | Date of birth 12 November 1990 | Nationality Pakistani

TEACHING STATEMENT & OBJECTIVE

My goal in teaching is to transform the acquired knowledge to different levels of academia. Though sometimes regarded as related but different tasks, research and teaching are to me two faces of the same coin. We must excel in research so that we have interesting things to share; and that we must excel in teaching so that things we share sound interesting and compelling. I require a faculty position that will utilize my dedication to educational needs and development that will bring out creativity and higher-order thinking that increases student performance. I wish to build a long-term career as a research scholar in a position that offers opportunities for career growth and freedom to apply new methods for expanding the horizon of engineering universities.

RESEARCH INTERESTS

As a faculty member, I would be pleased to teach in all topics of the undergraduate; **Electrical, Power Electronics, Energy & Environment**, and **Computer Engineering** curriculum. Particularly, I have a solid background in **Signal Processing, Basic Electrical concepts, Basic & Power Electronics, Instrumentation, and Bio-medical sensors and devices**. I also enjoy directing lab and project courses in **Machine Learning, Image Processing**. I would also be interested in teaching a graduate level course focusing on the area of **Renewable Energies**. The goal of the course will be to familiarize students with the latest research developments in **Electric Vehicles, Battery Management Systems, State of charge, Battery Modeling** methods, **Design and wind tunneling of Vehicles, Solar PV panels and its integration with vehicles, Small-scale wind turbines and grid systems**.

WORK EXPERIENCE

Lecturer (01-Aug-2022 to Cont.)

Department of **Electronic Engineering**, MUET Jamshoro, (Pakistan).

I am assigned to teach subjects such as practical work of Control Systems and Digital Control Systems for 3rd year and final year students. I also teach Electronic Circuits and Devices and Embedded Systems to 2nd year students.

Assistant Program Manager/Master Trainer (01-Aug-2020 to 31-May-2023)

ORIC Mehran University of Engineering & Technology Jamshoro, (Pakistan).

I was appointed as Master Trainer for designing and editing Teaching and Learning

Materials (TLMs) for all trades, specifically Advanced Electronics and Robotics.
 I am also assigned Management tasks, such as discussing TLMs with other Trainers, Handlings forms, Conducting interviews.
 I am also an integral part of plans involving business strategies to acquire funds for deserving and talented students.

Lecturer (01-Jan-2018 to 31-May-2018)

University of Sindh, Jamshoro, Hyderabad (Pakistan)

I was assigned courses, Signal Processing, Embedded Systems and Basic Electronics to teach 2nd and 3rd year students of electronics and telecommunication department.

Internee (19-Dec-2012 to 06-Jan-2013)

Mehran University of Engineering & Technology, Jamshoro (Pakistan)

Successfully completed internship program in the field of Project Based Learning in Advance Lab of Electronics department of Mehran UET.

Successfully completed research on project titled "Surveillance Drone".

EDUCATION

Level of Study	Institution	Field of Study	Area of Research	Year of Passing
1. Doctor of Philosophy (Ph.D.)	University Technology Malaysia (UTM), Johor Bahru. Skudai.	Electrical Engineering	Battery Management Systems, State of Charge (SoC), Battery Modelling, Energy & Environment	01/03/2019 to 01/08/2020 Deferred due to Covid-19
2. Master of Engineering (M.E)	Mehran University of Engineering & Technology, Jamshoro. Research Work Technical University Dortmund, (Germany).	Electronics CGPA: 3.67/4.00	Scattering Process in semiconductor devices and their time equations.	2017
3. Bachelor of Engineering (B.E)	Mehran University of Engineering & Technology, Jamshoro.	Electronics CGPA: 3.82/4.00	Electronics Embedded systems & Communication devices.	2013
4. Intermediate	B.I.S.E Sukkur	Group Engineering	Grade A	2008
5. Matriculation	B.I.S.E Sukkur	Group Science	Grade A	2006

COMMUNICATION SKILLS

Excellent. I can interact easily and can make everyone understand me.

Languages: English (C1 Level), Urdu and Sindhi (C2 Level).

COMPUTER SKILLS

- MS-Office.
- C++.
- Assembly Language.
- MatLAB.
- Simulink Model Designing
- Labview.
- Auto-CAD.

RESEARCH PUBLICATIONS:

- Jaya optimization algorithm for transient response and stability enhancement of a fractional-order PID based automatic voltage regulator system.
<https://doi.org/10.1016/j.aej.2020.03.005>
Published by Elsevier B.V. on behalf of Faculty of Engineering, Alexandria University.
- Automobile Suspension Prediction Model Based on Neural Network and Grey Neural Network.
<https://doi.org/10.55447/jaet.06.02.90>
Vol. 6 No. 2 (2022): Journal of Applied Engineering & Technology

PROJECTS

- Car Monitoring & Rescue System (Final Year Project).
- Braille System for Blinds (Term Project).
- Surveillance Drone (Research Project).

AWARDS & CERTIFICATIONS

- Graduate Member IEEE, Malaysia Section. Power Electronics Society (PELS)-2021
- Best Organizer- Title awarded in International University Exhibition "NEX'11" During bachelor's at Mehran University Jamshoro 2012.
- Youngest Inspirational Worker by Sindh Graduates Association Pakistan 2012.
- Group Leader in Final year Project of University 2012.
- Honor for working in fields during internship in Employes Old Age Benefits Institute Pakistan 2012.
- 3rd Position in Circuit & Wiring Competition at Mehran University 2011.
- 2nd Position in Micro-maze Competition at NED University Karachi 2010.

SUPERVISION/CO-SUPERVISION

<u>YEAR</u>	<u>TOPIC</u>	<u>Entity</u>
2023	Thermal Management System for Li-po battery cells using TEG modules and liquid cooling mechanism.	Final Year Undergrade Students Electronics Department.
2023	Smart Helmet using AI.	Final Year Undergrade Students Electronics Department.

