

CURRICULUM VITE

MUHAMMAD ZAIN UL ABDIN

Lecturer (Regular BS-18)
Department of Electronics
GC University Lahore



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OBJECTIVE

I strive to be a dedicated team member, working diligently in a respected organization. My goal is to make positive contributions in a dynamic and enriching environment that fosters personal growth and enables me to achieve both my own objectives and those of the organization.

PUBLICATIONS

- **Muhammad Zain Ul Abdin**, Abdul Sami, Ali Asif and Farah Aziz “Performance evaluation of linearization strategies for directly interfaced thermistor” **IOP (Measurement Science and Technology) 2023 IF: 2.4**
- Amir Ali, Ali Asif, Gui Yun Tian, Farah Aziz and **Muhammad Zain Ul Abdin** “Directly-digitized pulsed eddy current based quantification of aluminum sheet thickness” **IOP (Measurement Science and Technology) 2023 IF: 2.4**
- Ali Asif, Amir Ali and **Muhammad Zain Ul Abdin** “Resolution enhancement in directly interfaced system for inductive sensors” **IEEE Trans. Instrumentation. Meas. 2019 IF: 5.332**

ADMINISTRATIVE RESPONSIBILITIES

- Assistant Departmental Controller Examination (**Department of Electronics**)
- Member of committee Related to QEC & HEC Data, PREE, PGPR
- Assistant Departmental Coordinator (**Department of Electronics**)
- Member M.Phil. Admission Committee (**Department of Electronics**)

RESEARCH INTEREST

- Development of intelligent control system and instrumentation.
- Non-destructive testing (NDT)
- Hardware based linearization of non-linear resistive sensor
- Triboelectric Nanogenerator
- Battery Health Monitoring Techniques

RESEARCH EXPERIENCE

GC University, Lahore

(15-09-2020 to 12-09-2024)

Instrumentation R&D lab in Department of Electronics

- Development of Inductive and Capacitive probes for (NDT)
- Hardware Linearization of non- linear Resistive sensor
- Development of Triboelectric Nanogenerator setup

ACADEMIC PROJECTS / RESEARCH/THESIS

- Microcontroller Based irrigation system
- Mobile charger
- Automatic traffic signal
- Fire and Theft Alarm
- Second order based Direct interfacing of inductive sensor with Arduino

PROFESSIONAL TECHNICAL SKILLS

- **MS Office** (Word, PowerPoint, Excel)
- Proficient in **Proteus** and **Workbench**
- **Microcontroller Programming** using **Keil** and **Pinnacle**
- **Computer Programming in C++**
- **Computer Programming in Assembly**
- **MATLAB**
- Proficient in Programming Arduino (**Nano, Due, UNO**) **ESP32, ESP8266, Respi pi**
- **ANN (Basic Knowledge)**

COURSE / CERTIFICATIONS

- **Supervised Machine Learning: Regression and Classification** by DeepLearning.AI and Stanford University (**Coursera**) 2023
- **Advanced Learning Algorithms** by DeepLearning.AI and Stanford University (**Coursera**) 2023
- **Unsupervised Learning, Recommenders, Reinforcement Learning** by DeepLearning.AI and Stanford University (**Coursera**) 2023
- **Mathematics for Machine Learning: Linear Algebra** by Imperial College London (**Coursera**) 2023
- **Introduction to Embedded Machine Learning** by Edge Impulse (**Coursera**) 2023
- **Embedded Hardware and Operating Systems** by EIT Digital (**Coursera**) 2023
- **Introduction to Programming with MATLAB** by Vanderbilt University (**Coursera**) 2023
- **Engineering and Product Design Processes** by Arizona State University (**Coursera**) 2023
- **The Arduino Platform and C Programming** by University of California, Irvine (**Coursera**) 2023
- **Plastic electronics** by École Polytechnique (**Coursera**) 2023
- **Energy Harvesting** by Sungkyunkwan University (**Coursera**) 2023
- **MATLAB Onramp** by (**Math Works**) 2023

LECTURES/SEMINAR/CONFERENCE ATTENDED

- **17th National Symposium on Frontiers in Physics**, Government College University Lahore, Pakistan, 1-3 Dec 2022

TEACHING EXPERIENCE

GC University Lahore

Working as Lecturer Department of Electronics

20-10-2023 to Present

GC University Lahore

Working as Visiting Lecturer Department of Electronics

15-09-2020 to 31-07-2023

Leadership College Shad Bag Campus

Working as lecturer

03-08-2016 to 12-03-2019

Govt. Islamia College (Railway Road Lahore)

Working as lecturer

05-10-2015 to 31-05-2016

COURSES/LABS TAUGHT

Undergraduate level:

- Signals and Systems
- Control Systems (Theory + Lab)
- Solid-State Electronics
- Power Electronics (Lab)
- Analog Devices and Circuits I (Theory +Lab)
- Analog Devices and Circuits II (Theory Lab)
- Circuit Analysis (Lab)
- Transducers and Instrumentation
- Basics Electronics (Theory Lab)
- Digital Signal Processing (DSP)
- Elementary Mathematics II
- Coordinate Geometry

EDUCATION

PhD in Physics (2022)	GC University, Lahore	In progress
M.Phil. in Physics (2017)	GC University, Lahore	CGPA: 3.39/4.00
BSc. (Hons) in Electronics (2015)	GC University, Lahore	CGPA: 3.35/4.00
HSSC Pre-Engineering (2010)	Govt. Dyal Singh College, Lahore	Marks: 836/1100
SSC Matriculation (2008)	Govt. BCHS School, Lahore	Marks: 649/850

AWARDS/SCHOLARSHIPS/FELLOWSHIPS

- **PEEF scholarship** for M.Phil. **(2015-2017)**

CO-CURRICULAR AND EXTRA CURRICULAR ACTIVITIES

- Participate In speed Wiring (**Punjab youth Festival**) competition in 2014
- Participate In speed Wiring (**ElectroTech**) competition 2012
- **Cricket, WWE, Music, Movies** etc.

PERSONAL PROFILE

- **Father's Name:** Iftikhar Ahmad
- **Religion:** Islam
- **Marital status:** married
- **CNIC:** 35201-0928923-7