

Engr. SIDRA ASHRAF

PEC # (Elect-39586)

Cellular 0334-5323028

EMAIL:
sidraashraf@nutech.edu.pk

CAREER OBJECTIVE

As an experienced teacher and to build a long-term career in this profession, I am looking forward to a position in a prestigious institute.

My ability to deliver well along with the professional knowledge of the emerging engineering and computing technologies, will be beneficial for the students in their career growth.

EDUCATION

- **PhD. Electrical Engineering**
Sir Syed CASE University Islamabad
Year of Passing: In Progress
CGPA: 3.17
- **MS. Electrical Engineering**
Sir Syed CASE University Islamabad
Year of Passing: Feb 2024
CGPA: 3.03
- **B.S. Electrical Engineering with majors in Electronics**
University of Engineering and Technology, Taxila
Year of Passing: July 2013
CGPA: 3.19
- **Intermediate**
F.G Post Graduate College for Women, Kashmir Road Rawalpindi.
Year of Passing: 2009
Percentage: 81.81%
- **Matriculation**
Army Public School and College, Westridge 3, Rawalpindi
Year of passing: 2007
Percentage: 78.48%

EXPERIENCES

1. **Currently working as “Instructor” and Academic and Program Coordinator in NUTECH Islamabad since Jan 2023.**

2. Worked as “**Junior Lecturer**” in CASE (Center of Advance Studies In Engineering) June 2016-Dec 2022.
3. Worked as “**Lab Engineer**” in CASE(Center of Advance Studies In Engineering) from June 2015- June 2016
4. 1 year work experience in CARE(Center of Advance Research In Engineering) as “**Research Associate**”
5. Worked as “**Lab Engineer**” in UET,Taxila from Aug 2013-2015
6. 6 weeks internship in SCO (Special Communication Organization)6 weeks internship in MINISTRY OF IT in NTC (National Telecommunication Corporation) building.
7. One year internship at NDC (National Development Complex) doing Final Year Project
8. Executive member of SIEP (Society of Innovative Electrical Professionals) which is departmental technical society and Organized many technical events and competitions.
9. Worked as an Organizer in 10th Convocation of UET Taxila held on Tuesday 11th October 2011 at Jinnah Convention Centre, Islamabad.
10. Have always performed a major and remarkable role in Event Organization and Management in UET Taxila e.g. “**Student Week,” Farewell**” etc
11. First position in “**OPEN HOUSE 2013**”

FINAL YEAR PROJECT

GSM BASED CAR TRACKING SYSTEM WITH THEFT CONTROL

Research project sponsored by NDC(National Development Complex). This project is an attempt to design a tracking unit that uses the global positioning system (GPS) to determine the precise location of a vehicle to which it is attached and by using Global System for Mobile Communication (GSM) modem, this information is transmitted to a user. For doing so, microcontroller is interfaced serially to GSM Modem and GPS receiver. GPS modem will continuously give the data i.e. the latitude and longitude indicating the position of the vehicle. A GSM modem is used to send this position to the mobile at the other end from where the position of the vehicle is demanded. In case of theft, a message is sent by the owner to automatically stop the vehicle.

The purpose of this project is to design a system which is integrated with GPS-GSM to provide following features: a) Password protection, b) Location information, c) Real time tracking using SMS, d) theft control, e) Instantaneous communication so that a running report is quickly received.

It is completely integrated so that once it is implemented in a vehicle.

PROJECTS

Scientific calculator using Microcontroller	Water level detector
Verification of Gates, mux ,Decoder on FPGA Kit	Traffic light Control using Microcontroller
Noise filtration using DSP Kit	Transient response and noise of circuit using LT.Spice

MAJOR COURSES OF B.SC

☐ Object Oriented Programming ☐ Electronic Devices and Circuits ☐ Communication Systems ☐ Digital Image Processing	☐ Signals & Systems ☐ Electronic Circuit Design ☐ Linear Control Systems ☐ Discrete-Time Signal Processing
---	---

SKILLS

• Linux operating system • Object oriented programming (C++) • LT.Spice • PCB designing • Assembly Language • Proteus • Packet tracer • Typing • MP lab	• Keil Micro Vision: • Modelsim • AutoCAD • MATLAB • SPICE • mikroC • Adobe Photoshop • Cadance/ Mentor Graphics • Presentation making
--	--

MAJOR COURSES OF M.SC

• Advanced Electronic Design • VLSI Design • Optimization techniques in Power System • Digital Image Processing • Machine Learning • Wireless Communications • Big Data Analytics • Block Chain Technologies • Advanced Numerical Methods	• Solid State Electronics • Electronic System Design • Opto-Electronics: Theory and Application • Digital Video Processing • Computer Vision • Advanced Computer Networks • Power System Steady State Analysis • Finance for Technical Managers • AI/ML Technology and Applications
---	---

ACTIVITIES

☐ Internet surfing ☐ Games	☐ Event Management ☐ Graphic Designing
---	---

Courses Taught

• Digital Logic Design • Digital Logic Design Lab • Applied Physics • Mechanics • Computer Architecture • Computer Architecture Lab • Software Engineering • Linear Control Systems • Engineering Drawing • Intro to Embedded Systems	• Computer Organization and Assembly Language • Computer Organization and Assembly Language Lab • Object Oriented Programming • Object Oriented Programming Lab • Programming Techniques • Data Structures AND ALGORITHMS • Digital Signal Processing • Linear Circuit Analysis
---	---

HONORS

- 1st position in OPEN HOUSE'13 held at Electrical Department ,UET Taxila.
- Final Year Project sponsored by NDC (National Development Complex)

References

References will be furnished on request.