Mirza Muhammad Samiyan Baig

samiyan234@gmail.com
+92 (347) 3676176

Address
PIA Society, Gulistan-e-Johar
Karachi, Sindh
Pakistan

Objective

Research-driven and highly organized electrical engineer with an interest in coding and artificially intelligent solutions for the world of electronics, bringing articulate communication abilities and a keen eye for detail. Dedicated, responsible, and eager to grow abilities while boosting operational success.

Education

Ghulam Ishaq Khan Institute of Engineering Sciences and Technology (GIKI)
Topi, PK
September 2020 - Present (Expected graduation date: July 2024)

Bachelors of Science in Electrical Engineering(Electronics)
CGPA: 3:42/4.00

Bahria College Karsaz
Karachi, Pakistan
August 2017 - June 2019

High School Degree
Result: A

Work Experience

Team Foxtrot - HEAD Software Development & Embedded Systems
Topi, Pakistan
January 2021 - Present

- Trained and implemented a model for object detection using YOLOv7 on microprocessor named NVidia Jetson Nano.
- Instructed and experimented with ML/AI frameworks of python such as Scikit- Learn, TensorFlow and PyTorch.
- Led the sub-team for Fabrication and persuaded about 2 projects.
- Facilitated to the team's efforts in securing first place in Asia and sixth place overall at the IMechE UAS Challenge 2022.

Google Developers Student Club (GDSC) - Core Team - Head Machine Learning
Topi, Pakistan
October 2022 - April 2023

- Arranged with 6 members, 4 sessions for students on campus on introduction to Python programming and basic Machine Learning.
- Completed an app for Alzheimer's patients using Flutter with 3 members and devised basic functionality using Deep Learning Algorithms.
- Co-authored on a tool that conceptualized 4 image classifiers to auto-fill different aspects of a cloth in an app or website.

Integrated Dynamics (ID) - Engineering Intern
Karachi, Pakistan
July 2022 - August 2022

- Expedited an on-going project which focused on making a custom Ground Control Station (GCS) that compromised of 2 functions; monitoring and controlling the air vehicle.
- Completed the assembly and testing of 3 drones with different flight controllers such as Pixhawk, and APM.
- Created 3D coverings for different electronic parts of a UAV (Unmanned Aerial vehicle).

Academic Projects

Li-Fi System (Light Fidelity System)
- Designed a system that coded and decoded the 26 alphabets into and from different light signals. Programmed using Python, and libraries such as OpenCV, Pandas, and NumPy.

Function Generator
- Prepared a function generator using Op-Amps, that could generate 3 different waves such as Square, Triangular, and Sine with the capability of changing frequency and giving an off-set.

90 VA Step-down Transformer
- Analyzed and built a 90VA step-down transformer using silicon steel as core.

POS (Point-of-Sale) System
- Developed a POS system using PIC microcontroller PIC18F4550 with Embedded C.

Bluetooth Controlled Robotic Arm
- Proposed and fabricated a 3-DOF robotic arm using 3D printed parts. Programmed the functionality of the arm using Arduino UNO and NANO.

Awards & Achievements

- Business Proposition Award at IMechE UAS Challenge (August 2022).
- Dean's Honor List of fourth semester (June 2022).
- Business Proposition Award at IMechE UAS Challenge (August 2021).
- Dean's Honor List of second semester (July 2021).
- Introduction to Deep Learning with Keras - DataCamp Course (Feburary 2023).

Skills

- Software Skills: LT-spice, Multisim, Proteus, PCB Design, Simulink, Excel, Simscape
- Programming Skills: Python, Machine Learning, Deep Learning, Embedded C, C++, Arduino, Matlab.