ALI AZAM
ELECTRONICS ENGINEER

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PROFILE

Extremely competent **Bachelor's Degree holder in Electrical Engineering** with an in-depth knowledge of Digital Logic & Analog Design. Expertise in hardware description language (Verilog-HDL as well as VHDL) and also software programming language. Proficiency in system analysis and troubleshooting. Superb technical & creative writing skills. ***Aspiring for challenging engineering assignments in Electronics based research and development organization.***

- Knowledge of programming in Microsoft Visual C++, Python, National Instrument LABVIEW and Embedded programming tools.
- Outstanding team player with excellent interpersonal skills and problem-solving skills.

CAREER REVIEW / INTERNSHIPS

20TH JUNE 2017 – 28TH JUNE 2017
INTERN, PAKISTAN AERONAUTICAL COMPLEX, KAMRA

- Assigned to Radar System Department in Avionics Production Factory.
- Got an insight about radar system & testing equipment used to check DSP kits of F-16 aircraft.
- Programming experience on NI LABVIEW.

2ND JULY 2018 – 31ST AUGUST 2018
MANAGEMENT TRAINEE OFFICER, INTERNATIONAL COOPERATION OFFICE, AIR UNIVERSITY, ISLAMABAD

- Assigned to work on Faculty and Staff Development.
- Research on international universities with which the university should sign MoU.
- Learned about office file system.

ACADEMIC PROJECTS & RESEARCH WORK UNDERTAKEN

- **DETECTION & ESTIMATION OF FREQUENCY HOPPING SIGNALS   (FUNDED BY NESCOM)**
  It is a research-oriented project. An algorithm has been developed and implemented on NI LABVIEW which can extract the spreading characteristics of frequency hopping signal. This extracted information can provide benefit like interpreting / jamming the adversary's communication. ***Publication of the project is currently in progress.***
- **IMPLEMENTATION OF FINITE-DIFFERENCE-TIME-DOMAIN (FDTD) FORM OF WAVE EQUATION ON FPGA**
  It is a semester project in which we were asked to reproduce a research paper. We implemented the Wave Equation on FPGA Spartan 3 Kit using Verilog HDL as hardware language.
- **LINE MAZE SOLVER BASED ON ARDUINO**
  It is a semester project in which the shortest path algorithm was implemented in Arduino.
- **LOW FREQUENCY EQUALIZER AND SOUND AMPLIFIER USING OP-AMP**
  It is a semester project in which an 8-band equalizer was to be design and implemented using operational amplifiers.
- **ANALOG COMPUTER USING OP-AMP**
  It is a semester project in which an analog computer was designed which could perform

mathematical operations, integration and solve third order differential equation. It also consists of a signal generator that could produce square, sine and triangular waveform.

TECHNICAL SKILLS

- NI LABVIEW Programming
- Embedded C Programming (AVR, PIC,8051 and Arduino)
- Programming languages in MS Visual Studio: C++, Python.
- Mathematical computation and plotting in MATLAB
- PLC Ladder Programming
- Analog Design using Op-amp
- FPGA Programming on Xilinx with Verilog-HDL & VHDL
- Image Processing using OpenCV
- PCB Designing using Proteus
- Digital Logic Design
- Using MS Office tools.

CERTIFICATION

2015   Hands on Arduino Workshop at Air University

2017   Training in Image Processing on Raspberry pi using OpenCV in python language at National Institute of Science and Education Islamabad.

ACADEMIC CREDENTIALS

- **Bachelor in Electrical Engineering** | Air University, Islamabad   (2014 –2018)
  Major: Electronics   **CGPA:** 3.19/4

- **HSSC** | F.G Sir Syed College, The Mall Road, Rawalpindi   (2012 – 2014)
  Subject: Pre- Engineering **Grade:** B

- **SSC** | Army Public School Seven Streams, Quetta Cantt   (2010 – 2012)
  Subject: Sciences   **Grade:** A1

EXTRACURRICULAR ACTIVITES

- **Operation Head** of Air Tech'16 (First Technical Olympiad of Air University)
- **Event Head** of Star Event "Imaging Processing" in Airtech 17
- **Organizer** International Multi Topic Conference (INMIC'16) at Air University.
- **Decor Head** of Air University Cultural Society 2018.
- **Part of Decor Team** of AirNexus'16 (First Olympiad of Air University).

REFERENCES

Mr. Mumajjed-ul-Mudassir
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