



UMAR AFZAL

Electrical Engineer

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SKILLS

PROFESSIONAL

- Computer Architecture
- Electrical Circuit Design
- Circuit Solving and Simulations
- C/C++ programming
- Atmel AVR microcontroller
- Technical and Creative
- Good Communication
- Teamwork and Management
- Digital Logic Design
- FPGA Implementation
- Embedded System

SOFTWARES

- Xilinx ISE/Vivado
- Proteus/PSpice
- Matlab
- AutoCAD
- Modelsim
- Cisco Packet Tracer
- Microsoft Office
- Linux OS
- Q-flow
- Ansys HFSS

OTHER

- Graphic Designing
- Canva
- Adobe Illustrator
- Data Entry

LANGUAGES

- English (Fluent)
- Urdu (Fluent)
- Punjabi (Fluent)

HOBBIES AND INTERESTS

- Electrical Devices
- Graphic Designing
- PCB designing
- Robotics
- Cricket

PROFILE

- Primary objective is to leverage my electrical background and expand my expertise in the domain of Electrical Research and Innovation.
- Possess the adaptability to excel in diverse work environments and exhibit proficiency in effective management practices.
- Highly skilled engineering student with a strong proficiency in numerical analysis and problem-solving.

EDUCATION

- **B.S Electrical Engineering** 2020-2024 (In progress)
Namal University Mianwali
Current CGPA: 3.12/4.0
- **FSc Pre-Engineering** 2018-2020
Universit college of Montgomery
Marks: 88%
- **Matric (Science)** 2015-2017
Misali Zikriya Science Secodary school Kameer
Marks: 95.81%

PROJECTS

- **4-bit Arithmetic Logic Unit**
Implemented on both gate level and software building calculator
- **Home Automation System**
Designed a small Home Automation using different sensors in Electronic Devices and Circuit
- **Communication Network System**
Wired and wireless networking system using routers, servers and access points of University
- **Robot in Control system**
Instructed lego Robot by making PID controller
- **University Management System in C++**
Used concepts of OOP and Data structure and Algorithm
- **Communication System transmitting and receiving signal**
Four signals of same bandwidth were transmitted and received remaining in 10kHz bandwidth
- **Single Cycle RISC-V processor**
5 instructions executed in single cycle processor of RISC-V in Verilog (Load, Store, Addi, Subi, And)
- **Design and Integration of Branch Predictor in Pipeline RISC-V Processor**
Implemented branch predictor in CV32E40P RISC-V processor core for increasing performance of the processor and analyzed the accuracy by using bench marks

CERTIFICATES

- **IEEE Certificate of Appreciation** May, 2022
IEEE Namal Student Branch, Namal University, awarded this for serving society.
- **UI/UX Designing Workshop** October, 2022
IEEE Namal Student Branch certificate of participation
- **CESD Certificate of Completion** October, 2022
06 weeks CESD internship program of verilog language
- **Fully Funded Scholarship & Laptop holder** November, 2017
Awarded Laptop by the Government of Pakistan