



Arslan Ahmed

Electrical Engineer

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I am a passionate Electrical Engineering student eager to embark on a career in Hardware Design and Verification. I have a strong understanding of RISC-V architecture, and I am driven to translate theoretical concepts to practical applications. Seeking a role to apply expertise in RISC-V, and FPGA-based verification.

EDUCATION

BS Electrical Engineering

Namal University, Mianwali

11/2021 - Present

Courses

- | | |
|-------------------------|-------------------------|
| - Digital System Design | - Computer Architecture |
| - Digital Logic Design | - Embedded System |
| - Internet of Things | - Power Electronics |
| - Control System | - Communication System |

Online

RISC-V Linux Foundation

08/2024 - Present

Courses

- | | |
|------------------------------------|---|
| - Introduction to RISC-V (LFD110). | - Foundations of RISC-V Assembly Programming (LFD117x). |
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PERSONAL PROJECTS

Design and Implementation of Single Precision FPU in PicoRV32 RISC-V Core (10/2024 - Present)

- Project involves designing FPU that perform arithmetical, logical and comparison instructions of F-Extension. It's Integration in core and perform functional verification using open-source tools and FPGA.

RISC-V Single Cycle and Pipelined Processor Design (11/2024 - 01/2025)

- Designed a single-cycle RISC-V processor and extended it to a pipelined version. Performed functional verification using ModelSim and iverilog.

4-bit ALU Design and It's Hardware Implementation

- Designed a 4-bit Arithmetic Logic Unit (ALU) that is capable of performing basic arithmetic and logical operations such as add, sub, AND, OR, NOT and XOR.

Line following Robotic car

- A Robotic car formulated that follows line, detect objects around it and hit them.

SKILLS

RISC-V

Verilog

Assembly

Python

C/C++

iverilog

Vim

ModelSim

Linux

Questasim

Yosys

Vivado

VOLUNTEER EXPERIENCE

Vice President (2023 - 2024)

Skills Development Society (Namal)

Treasure Head (09/2024 - Present)

Scholar Bridge Society (Namal Student Chapter)

Tutor (2022 - 2024)

NSSI (Namal Society for Social Impact)

CERTIFICATES

Corporate Readiness Training (05/2024)

3 Days Training for Corporate Readiness in NETSOL

Foundations of RISC-V Assembly Programming (LFD117x).

Linux Foundation course LFD117x completion certificate

Social Service Certificate

Tutor of Physics and Mathematics for FSc students

Soft Skills Development Program

2 Days Training by PEEF for Soft Skills Development at NAMAL University

LANGUAGES

English

Full Professional Proficiency

Urdu

Native or Bilingual Proficiency

Punjabi

Native or Bilingual Proficiency

INTERESTS

RISC_V Processor

Hardware Design and Verification