Muhammad Salman

Electrical Engineer

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Electrical engineer specializing in FPGA programming (Verilog) and RISC-V processor development, with expertise in circuit analysis & simulation (MATLAB, Proteus, PSpice). Skilled in end-to-end hardware design and optimizing performance for embedded systems. Combines hardware innovation with software integration to develop scalable, cutting-edge solutions.

EDUCATION

Bs Program
Namal University Mianwali

11/2021 - Present   *3.07*

Courses
- Computer Architecture
- Technical Writing and Communication
- Digital Signal Processing
- Digital Logic Design
- Embedded Systems
- Communication Systems
- Power Electronics

Fsc(Pre-Engineering)
Daanish School Boys Hasilpur

973/1100

WORK EXPERIENCE

Event Organizing Team Member
Namal University Mianwali

Achievements/Tasks
- Got experience in arranging and participating in Namal Robo Tec 2024 and held at Namal University, Mianwali, in which more than 15 universities and 100+ teams participated nationwide.

ORGANIZATIONS

IEEE Namal Student Branch
Social Media Head and Coordinator

Namal Tech Expo
Event Organizer Team

Scholar Bridge Society Namal Chapter
Head Graphics Designer

SKILLS

Processor Design · Problem Solving · Verilog · Basics C++ & C · FPGA Prototyping · Assembly · Proteus and PSpice · Circuit Analysis

PERSONAL PROJECTS

Single-Cycle RISC-V Processor Design
- Designed and built a basic RISC-V processor from scratch. Wrote the hardware code, added pipelining for better performance, and tested it using free tools (Iverilog and GTKWave). Made sure it works with standard RISC-V software tools like GCC

Design and Implementation of RISC-V Processor for AES Algorithm
- Final Year Project
- Developed and integrated the AES algorithm into the PicoRV32 RISC-V processor, optimizing it for cryptographic operations. Performed verification tasks using Verilog

Line Follower Robot
- Designed and implemented a line follower and hurdle detection robot using AVR microcontroller.

Cricket Scoreboard Management System
- By using C++, I designed a cricket scoreboard management system and implemented sorting and searching functionalities on the CodeBlocks tool.

Converter Design
- I have designed an optimized converter by comparing buck, boost, buck-boost, and flyback converters on MATLAB.

LANGUAGES

Urdu
Full Professional Proficiency

English
Professional Working Proficiency

Punjabi
Full Professional Proficiency

INTERESTS

Problem Solving · Programming · Freelancing · Graphic Design · Video Gaming