

Uneeb Kamal

uneebkamal125@gmail.com | [linkedin.com/in/uneeb](https://www.linkedin.com/in/uneeb) | github.com/uneeb125

EDUCATION

University of Engineering and Technology

Bachelor of Electrical Engineering, CGPA: 3.66

Lahore, Pakistan

Sep. 2021 – Present

LGS JT

A-levels in Sciences

Lahore, Pakistan

Aug. 2018 – Aug 2020

EXPERIENCE

Undergraduate Research Assistant

Digital Design and Research Center

July 2023 – Aug 2023

Lahore, Pakistan

- Studied the RISC-V specification to gain familiarity with its Virtual memory implementation
- Utilized RISCOF for virtual memory compliance testing of the CVA6 RISC-V implementation
- Wrote 60+ RISC-V Assembly tests for virtual memory compliance according to the provided test plan
- Compared the CVA6 Spike model with the RISC-V Sail golden model and generated a compliance report

Technical Lead

UETR-V-PCORE Linux Boot Hackathon

Oct. 2023

Lahore, Pakistan

- Version matching for buildroot system
- Resolved cross-compile toolchain compatibility for linux C syntax
- Executed the binary on Verilated UETR-V-PCore
- Executed the linux image on FPGA based implementation of UETR-V-PCore

Participant

gem5 Hackathon

Lahore, Pakistan

- Familiarization with the source code for gem5 simulator
- Wrote a RISC-V assembly instruction implementation for gem5 as an exercise

PROJECTS

TIVA Device Interfacing

- Wrote C code to utilize the communication hardware interfaces available on tiva C series
- Configured and read motion sensor readings from MPU6050 over the I2C protocol
- Introduced wifi capability using esp01 over UART using AT commands
- Assembled an model car with H-bridge based independent PWM motor control
- Setup esp32 has car control to communicate with TIVA for gesture based commands

CERTIFICATES

- **Coursera Stanford:** Supervised Machine Learning
- **Coursera Stanford:** Advanced Learning Algorithms
- **Coursera Stanford:** Unsupervised Learning and Recommenders

TECHNICAL SKILLS

Languages: SystemVerilog, Python, C

Developer Tools: gem5, spike, sail, RISCOF, Docker, Tr, VS Code

Libraries: pandas, NumPy, Matplotlib, sklearn **Misc.:** Linux systems management