

# Aditya Reddy

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## EDUCATION

- **Manipal University Jaipur**, Jaipur, India 2024 – 2028 (*expected*)  
Bachelor of Technology in Electronics and Communication Engineering
- **Army Public School Bolarum**, Secunderabad, India 2014 – 2023  
Coursework: PCMB, Artificial Intelligence

## EXPERIENCE

### IgniteXL Ventures

Remote

*IgniteXL Remote Extern*

*Sep 2023 – Oct 2023*

- Analyzed 50+ early-stage companies in longevity tech, created investment frameworks that influenced \$2M+ funding decisions
- Researched and evaluated start-ups to assess alignment with IgniteXL's investment thesis
- Designed an investment summary document presenting key information to potential investors

## PROJECTS

### Criver: Minimal HTTP/1.1 Web Server | C, POSIX Sockets

[GitHub Link](#)

- Built a custom HTTP/1.1 web server from scratch using raw POSIX sockets and standard C, with zero external dependencies.
- Implemented full request parsing, static file serving with MIME type detection, and directory traversal protection.

### Hamming (7,4) Error Correcting Code | C, Verilog

[GitHub Link](#)

- Designed a Hamming (7,4) encoder/decoder in C and Verilog to detect and correct single-bit errors in data transmission.

### Laplacian Edge Detection | C

[GitHub Link](#)

- Developed an image processing tool in C using the Laplacian operator to detect intensity discontinuities in grayscale images.

### Sudoku Solver and Generator | C

[GitHub Link](#)

- Implemented a backtracking-based Sudoku solver in C with puzzle generation and difficulty tuning capabilities.

## ACTIVITIES & EXTRACURRICULARS

- **Elicit Hacks 9.0 MUJ Hackathon** *October 2024*
- **Harvard CS50P Certificate** *August 2023*
- **Volunteer – Bison Asha School** *May 2021 – August 2023*

## TECHNICAL SKILLS

**Programming:** C, Python, Verilog, SystemVerilog, Bash

**Tools and Frameworks:** Git, Make, Linux CLI, GCC, Shell scripting, LaTeX, GTKWave, Verilator, Icarus Verilog, RISC-V Toolchain

## INTERESTS

Hardware-Software Co-design, Embedded Systems, Custom CPU Design, Digital Design with HDL, Operating Systems, FPGA, System Programming, Open Hardware