Saksham Mishra

Education

Indraprastha Institute of Information Technology, Delhi

July 2023 - Present

B-Tech in Electronics and Communication Engineering

• Coursework: Computer Organization, Linear Algebra, Advanced Programming, Embedded Logic Design, Data Structures and Algorithms

Dhruva Public School, Delhi

2020 - 2022

Class-XII, PCM (92.2% CBSE)

Greenwood Public School, Gurugram

2013 - 2020

Class-X, (90.2% CBSE)

Technologies

Languages: C/C++, Python, Java, Javascript, Verilog

Technologies: Git, Xilinx Vivado, SQL, VSCode, IntelliJ, Arduino IDE, KiCad, LTSpice

Projects

RISC - V Custom Assembler & Simulator — github repo

Feb, 24 - Apr, 24

- A custom RISC V Assembler and Simulator written in C++ to convert RISC-V assembly code into machine code (binary instructions) for execution on a RISC-V processor.
- o Tech Stack: C++, RISC-V instruction set
- o Team Size: 4

Angry Bird Style Video-Game — github repo

Oct,24 - Nov,24

- Developed an angry-bird style game using LibGDX library of Java with 3 playable levels. Described the in-game mechanisms using structured and behavioral UML diagrams.
- o Tech Stack: LibGDX(Java), gradle, Box2D
- o Team Size: 2

SpotSync – Parking Optimization App — github repo

Feb.24 -Apr.24

- An application that optimizes parking space allocation in real time using live camera feeds. Self Check-in and Check-out: Calculates parking fee by maintaining record of entry and exit time through License plate recognition.
- o Tech Stack: Python, React Native, OpenOCR, YOLO Model
- o Team Size: 5

IOT Based RFID card Attendance System— github repo

Mar, 24 - Apr, 24

- Developed a smart attendance system leveraging RFID technology and the NodeMCU ESP8266 microcontroller. This innovative project streamlines the process of attendance tracking and enhances accuracy and efficiency.
- o Tech Stack: ESP8266 Node-MCU, Arduino IDE, RFID

Temperature Based Motor Control System — github repo

Mar, 25 - Apr, 25

- Developed a fully Analog temperature regulation system using diodes, BJTs, and op-amps, eliminating microcontroller dependency. Implemented a dual-threshold window comparator with to autonomously control heating and cooling, ensuring stable thermal regulation through precise Analog signal processing.
- Equipment Tech: LT Spice (Schematic), BJT, Relay, Op-Amps and Diodes
- Team Size: 3

Positions of Responsibility

Achievements and Awards

- $\circ\,$ Finalist in Anveshan 3.0 (Intra-College Hackathon) Position : Team Leader
- $\circ\,$ Amazon Hack-on Season 5 : Among top 1400 teams out of 10,000+ teams

Hobbies and Interests

- $\circ\,$ Writing Stories, Reading Books, Table Tennis
- o Video Games, D&D