

JUHI SAHNI

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EDUCATION

- **Indian Institute of Technology Patna** | **CPI: 9.84** Bachelor of Technology (B.Tech) in Computer Science and Engineering (2023 - 2027)
- **Cathedral Sr. Sec. School, Lucknow:** Class XII CBSE - 96%, Class X CBSE - 98% (2009 - 2023)

TECHNICAL SKILLS

Programming Languages: C/C++, HTML, CSS, JavaScript, Python, Kotlin, Basic Linux commands, MYSQL, Logisim.

CS Fundamentals: Data Structures and Algorithms, Digital Logic And Computer Organisation, Computer Architecture, Database Management System.

Soft Skills: Leadership, Team Work, Communication, Problem Solving.

RELEVANT COURSEWORK

GAINED INDEPTH KNOWLEDGE OF THESE SUBJECTS

Transcript

Coursework till 4th semester

Aug 2023 - Current

- Developed classification and regression models using KNN, Naïve Bayes, Decision Trees, Linear and Logistic Regression.
- Trained ML models on real-world datasets (Iris, Titanic) with **85-95%** accuracy.
- Designed and simulated **more than 10 combinational and sequential circuits** (using MUX, ALU, Flip-Flops, Counters) using **Logisim**.
- Developed and executed **over 20 MIPS assembly programs** on the MARS simulator.
- Implementing Verilog-based designs on **FPGA** hardware to optimize performance.
- Gained experience in **20 or more data structures and algorithms**, solved **at least 250 DSA problems** on LeetCode, CodeStudio, and GeeksforGeeks.

PROJECTS

The Empire Of Cairo | C, VS Code

Github

- Led a **10 member team** to develop a C-based adventure game, achieving **30%** higher user engagement.
- Implemented a crossword puzzle module, doubling game complexity and retention rate **2 times** and engagement.
- Designed and executed a user study with more than 100 students, achieving **70%** positive feedback.

Custom Assembler and Emulator | C++, VS Code

Github

- Developed a two-pass assembler and emulator for a custom ISA (Instruction Set Architecture) and got appreciated in a batch of **over 150 students**.
- Implemented memory dumps, instruction tracing, and real-time debugging features.
- Successfully tested on over 20 assembly programs, including Bubble Sort and Fibonacci Sequence.

Development Projects | HTML, CSS, JavaScript, Kotlin

Github

- Developed a responsive web page for sharing sweet recipes, enhancing user engagement through user attractive design.
- Leading the frontend development of a **finance tracker app**, implementing a clean UI/UX using Kotlin and Android Studio.
- Currently in the development phase, with plans for expense categorization, budget insights, and financial tracking features.
- **Smart India Hackathon -2024** Project: Although the project is on a hold but the proposal got selected in Internal Hackathon: aiming to build AI-based image enhancement for lunar crater analysis (Chandrayaan-2 OHRC data).

YouTube

ACCOMPLISHMENTS

- Ranked in the **Top 1%** among IIT Patna students with a perfect SPI of 10/10 in Semester 2.
- Selected from over **80,000** applicants as a mentee for Codeforces Graphs Camp, mastering more than 17 advanced graph techniques.
- Finalist **Top 150 in a field of over 5000 students** in the NXP Women in Tech (WIT) Program 2024.
- **School Topper & "Student of the Year 2023"** in Class 12th.

LEADERSHIP / EXTRACURRICULAR

- **Sub-Coordinator of MPR Committee** at Anvesha - Annual Fest of IIT Patna (2024-25).
- **Co-Mentor** at Student Mentorship Program (2024-25).
- **Active Volunteer** at NSS, IIT Patna, contributing over 100 hours to community service (2023-24).

BADGES

- **Google for developers profile:** Learning development through various courses with currently holding **more than five** relevant badges.