Devansh Soni

Bachelor of Technology Delhi Technological University, Delhi • +91-95099xxxxx
• GitHub Profile
• LinkedIn Profile

Education

• XII, CBSE

• Bachelor of Technology in Computer Science & Engineering

Aug 2023- July 2027

Delhi Technological University, Delhi

CGPA: 8.18

94.6%

Gyan Vihar School Jaipur

Mar 2022 - Apr 2023

Personal Projects

• DTUMegle Website

A real-time chat platform enabling random user pairing

- Developed a scalable chat application with a React-based frontend and Deno backend to facilitate seamless random user pairing.
- Engineered a high-performance backend to handle 50+ concurrent users, ensuring low latency and reliability.
- Achieved over 2,000 unique users and 10,000 page visits.
- Technology Used: React, Deno

• Orca Github

A custom-built chess engine with competitive performance

- Developed a chess engine from scratch in C++ without reliance on external libraries, emphasizing performance and algorithmic efficiency.
- Achieved a processing speed of over 2 million nodes per second, enabling depth-6 perft in under 3 seconds.
- Capable of defeating Stockfish configured at 1600 Elo, showcasing robust move evaluation and gameplay logic.
- Implemented custom board representation, move generation, and evaluation functions tailored for high performance.
- Optimized alpha-beta pruning and move ordering to enhance search efficiency and decision-making speed.
- Technology Used: C++

• IoT Environmental Monitoring System

Dashboard

ESP32-based temperature and humidity monitoring with web dashboard

- Built an ESP32-based IoT system using DHT22 sensor to continuously monitor and report room temperature and humidity data.
- Developed a FastAPI backend service for handling sensor data uploads and providing RESTful endpoints for dashboard integration.
- Created a responsive web dashboard using Next.js to visualize real-time environmental data with interactive charts and monitoring capabilities.
- Implemented seamless data flow from hardware sensors to web interface, enabling remote monitoring and historical data analysis.
- Technology Used: ESP32, DHT22, FastAPI, Next.js, Python

Technical Skills and Interests

Languages: C/C++, Python, JavaScript

Relevant Coursework: Data Structures & Algorithms, Operating Systems, Object Oriented Programming,

Database Management System and Computer Networks.

Areas of Interest: Low-Level Programming, Simulations, Computer Hardware

Codeforces Profile: Peak rating 1194, with over 300 solved problems.

Leetcode Profile: Solved over 90 problems, focusing on algorithms and data structures