Pranav Kr

Aspiring Software Engineer — Problem Solver — Tech Enthusiast & Creative Thinker

Education

National Institute of Technology Patna

2023-27

CGPA: 8.54/10

B. Tech in Computer Science and Engineering (2nd Year)

My Projects 📦

Virtual Interview Suite - Dynamic Web Platform

NextJS, React, Convex, Clerk, Stream, Vercel

- Outline: A next-gen coding interview hub, seamlessly integrating live video calls, screen sharing, and a multi-language code editor. Empowering users to effortlessly schedule interviews, collaborate in real-time, record sessions, and provide live reactions, reviews, and remarks. It's interactive UI ensures a seamless, engaging interview experience.
- Concepts Used: User authentication, State management, Async operations, API integration, Real-Time features

Sudoku Game Solver - DSA Project

C++, Algorithms, Data Structures, React, UI/UX

- Overview: Demonstrating the ability of DSA to solve problems using Backtracking and Recursion
- Present Stage: Implemented in C++ within VS Code, Currently transitioning to a a web-based platform using React
- Future Scope: Building a multi-functional platform showcasing problem solving capability using DS & Algorithms

Interactive Graph & Algorithm Visualizer - DSA Project

ReactJS, TypeScript, D3.js, Material-UI

- Overview: Developing an interactive platform for visualizing graphs and their traversal algorithms
- Present Stage: Exploring D3.js, mastering its tools to craft dynamic and visually engaging traversal visualizations
- Concept: Implementation of BFS, DFS, Dijkstra & other graph algorithms in an interactive web dev project
- Future Scope: Enhancing the platform to visualize how algorithms operate within actual DS like Stacks & Queues

Code to Kinetics - Robotics Projects

C++, IoT, Microcontroller, Sensors, PWM, BLE

- HomeSync: Built a futuristic home automation system using IoT to remotely control appliances via the internet
- Line-following Bot: Developed an autonomous robot that navigates paths using pre-defined Algorithms
- Demolisher: Engineered a Robowar bot using BLE technology for precise control and high-performance combat

Technical Expertise & Core Competencies Φ_n^*

Programming Languages: C, C++, Python, Java, SQL, Tailwind, JavaScript, React, NextJs

Proficient Dev Tools: VS Code, IDX, WebStorm, PyCharm, Chrome DevTools and Jupyter Notebook

Adept at working with: CLI (Terminal), APIs, CDN, Git, GitHub, MySQL, Virtual Environments & Codespaces

Currently Exploring: DSA (Graphs & DP) & Machine Learing (delving into NumPy)

Future Endeavors in Learning: Finance, AI/ML & Web3

Leadership & Soft Skills

Leadership: Led and managed the project 'SBA' for our course, the 'QuadDro' as our side hustle & team 'Demolishers' to victory twice in inter-college Robowar events, each time collaborating effectively with four teammates.

Problem Solving: Applied critical thinking and problem-solving skills to develop and execute various projects, demonstrating innovative solutions to complex challenges.

Communication: Delivered impactful presentations, earning the "Best Presenter" title at both "SIH" and "Global Warming" presentations. Additionally, our group was recognized as the best in the class for GDs.

Adaptability: Demonstrated quick learning and effective application of new technologies such as NextJS, Convex, Clerk, and Stream to ensure project success, highlighting the ability to swiftly adapt to changing tech trends.

Extracurriculars, Interests & Pursuits

I love solving DSA questions, play Chess & Badminton. Also I'm into mathematics & Finance.

Robotics enthusiast, I like making bots and working on related projects over the weekends.