Ashish Prasad

Education

IIITDM Jabalpur Nov. 2022 – Present

B-Tech in Computer Science and Engineering

CGPA: 7.2

St. Lawrence Super Thirty

May 2021 – Mar 2022

12th - 89%

Experience

Higher Secondary Education

Fusion Project

July 2024 – Present

Contributor (Team of 8)

IIITDM, Jabalpur

- Contributed to the development of a full-scale Course Management System using Django, focusing on backend data integration through efficient ORM queries and database indexing strategies. The system supports over 1000+ concurrent active users and integrates with the university's SSO authentication system.
- Assisted in migrating from a monolithic front-end built with Vanilla JavaScript to a React.js component-based architecture, enhancing modularity and reducing page load times by 60%, as measured by Lighthouse performance scores.

Projects

AlphaIO Sept.2024 - Dec.2024

- * Developed AlphaIO, a social media platform inspired by microblogging apps using the MERN stack (MongoDB, Express, React, Node.js).
- * Implemented real-time communication features with Socket.io, allowing for dynamic chat functionality with seen/unseen message indicators and image sharing.
- * Integrated JWT-based authentication for secure user registration, login, and session management.
- * Built a fully responsive UI with Chakra UI to ensure an optimized experience across mobile, tablet, and desktop devices.
- * Used Cloudinary for efficient image and video storage and management.
- * Access the deployed platform at alphaio.onrender.com.

CodeArena

- Engineered a scalable online coding arena implemented with Node.js, React.js, and Docker, providing a secure containerized environment for code compilation. Hosted on AWS EC2, with S3 bucket for storing large test cases.
- Automated contest management using Kubernetes to auto-scale infrastructure, supporting up to 20,000+ users during live contests. Integrated WebSockets for real-time chat, collaboration, and custom contest rooms with baked-in voice support.
- Developed a Python-based Beautiful Soup parser to scrape competitive programming problems from Codeforces, reducing manual effort by 95%.

Skills & Interests

Languages: Python, JavaScript, Go(GoLang), C++, TypeScript Developer Tools: VS Code, Cursor, Google Cloud Platform

Technologies/Frameworks: Next.js, MongoDB, Prisma, Express, React, Node.js, Socket.io, Cloudinary, Clerk

Interests: Chess (1700 ELO on Chess.com)

Coding Profiles

Codeforces: Pupil (1350) $_{A}kprasad_{1}4$ CodeChef: 3 Star (1685) akprasad₁4

LeetCode: Akprasad14

Certifications

100 Days of Code: The Complete Python Pro Bootcamp Udemy — Oct. 17, 2024

Instructors: Dr. Angela Yu, Developer and Lead Instructor

Completed a comprehensive bootcamp focusing on Python programming, algorithms, data structures, and best practices.