Crystal Jain

Summary

Aspiring Software Engineer with strong problem-solving skills and a solid foundation in Data Structures and Algorithms. Proficient in modern web technologies including React.js, Node.js, and MongoDB, with hands-on experience building scalable full-stack applications.

Education

Graphic Era Hill University, Dehradun

2022 - Present

B. Tech in Computer Science and Engineering

7.2/10 CGPA

John Milton, Agra

2022

12th CBSE

80.2 %

Colonel's Brightland, Agra

2020

10th CBSE

90.6 %

Projects

VisionCheck – AI-Powered Eye Disease Detector Python, TensorFlow, OpenCV,Flask,CNN

Source Code

- Developed an AI-powered VisionCheck application utilizing a Convolutional Neural Network (CNN), achieving 81% accuracy in 4-class classification of eye diseases.
- Engineered a secure Flask web platform with full-stack capabilities, including user authentication, image upload, prediction display.
- Managed a dataset of over 10,000 retinal images spanning different disease categories to train and validate the model.

Full-Stack Real-Time Chat Application MongoDB, Express.js, React.js, Node.js

Source Code

- Architected and deployed a full-stack, real-time chat application using the MERN stack and WebSockets via Socket.io to
 achieve message latency of under 200ms.
- Engineered a secure RESTful API with 10+ endpoints for all CRUD operations, implementing JWT-based authentication and bcrypt hashing to ensure user data integrity and protection.
- Constructed a dynamic, responsive UI with React and TailwindCSS, managing global state with Zustand to create a seamless, interactive user experience with live online status indicators.
- · Live Demo available here

CloudGuard - Secure File Backup System Node.js, AWS S3, AWS Lambda, AWS CloudWatch

- Designed a secure file backup platform storing and retrieving files using AWS S3, handling 10,000+ uploads/month.
- Integrated AWS Lambda and CloudWatch for automated logs, triggering alerts on 95% of suspicious access patterns.
- Implemented encryption and access control for each upload, ensuring 100% data privacy compliance.

Technical Skills

Languages: C++, Python, JavaScript, Java, C

Development: React, HTML, CSS, ReactJs, NodeJs, Tailwind, Bootstrap

Developer Tools: VS Code, GitHub, Jupyter, Postman, Insomnia

Other Libraries and Frameworks: Flask, Laravel, Streamlit, OpenCV

Relevant Coursework

• Data Structures, Algorithm Analysis, DataBase Management, Operating Systems, OOPS Concept, Machine Learning, System Design, Computer Networks

Scholastic and Co-Scholastic Achievements

- **GEHU Coding Championship Runner-Up:** Achieved 2nd place in the annual university-level coding contest with 500+ participants.
- Techfest Hackathon Finalist: Reached the final round of Graphathon hosted by Graphic Era University, solving real-world tech problems.
- College Coding Club Core Member: Organized coding contests and peer-learning sessions; mentored juniors in DSA and problem-solving.