Gaurav Singh Samant

Education

Graphic Era (Deemed to be University), Dehradun

2021 - 2025

B. Tech in Computer Science & Engineering

8.6/10 CGPA

Experience

Summer Research Intern

July 2024 - Present

AI in Radiology: Automating the Detection of Fractures in X-Ray Images Graphic Era (Deemed to be University), Dehradun

- Engineering and training convolutional neural networks (CNNs) to automate the detection of fractures in X-ray images, improving diagnostic accuracy and efficiency.
- Collaborating with a team to integrate AI solutions into clinical workflows, contributing to research papers and presentations on AI-driven radiology advancements.

Projects

Cryptocurrency Exchange Website

- Built a cryptocurrency exchange website using JavaScript, ReactJS, and Solidity, enabling secure and efficient trading of digital assets.
- Integrated smart contracts with Solidity to manage transactions and ensure transparency and security in the exchange process.
- Applied robust security measures including multi-factor authentication, encryption, and secure API integration, ensuring the safety of user funds and sensitive data, and fostering trust among users in the cryptocurrency exchange ecosystem.

CNN model for COVID-19 detection from chest X-ray images

- Created a Convolutional Neural Network (CNN) model for detection of COVID-19 from chest X-ray images.
- Significantly improved diagnostic accuracy by leveraging state-of-the-art deep learning techniques. Trained the model over 5 epochs, achieving an accuracy of 95.09%.
- The model boasts a total of 959,137 parameters, emphasizing its complexity and capability to handle diverse image datasets.

Event Management System

- Developed a comprehensive event management platform utilizing Next.js 14 and Node.js, enabling global event creation, management, and ticketing with secure payment integration via Stripe.
- Implemented full CRUD operations for events and user authentication using Clerk, ensuring efficient and secure user management, as well as seamless event creation, updating, and deletion capabilities.
- Utilized modern technologies and frameworks, such as TypeScript, Tailwind CSS, React Hook Form, Shaden, and uploadthing, to build a scalable and responsive application that streamlines event management and improves overall platform performance.

Technical Skills

Languages: C++, Java, Python

Web Technologies: HTML, JavaScript, ReactJS, NodeJS

Databases: MySQL, MongoDB

Machine Learning Tools: TensorFlow, OpenCV, Matplotlib

Achievements

HackOn With Amazon - Season 4: One of 138 teams selected for the Idea Submission Round out of over 38,000 participants.

Strengths

Team Leadership: Directed the coordination of a state-level debate competition as Event Head for the university's debating society.

Project Management: Led a team of 4 members to complete an academic project 2 weeks ahead of schedule.

Interests and Hobbies

Debating: Member of debating society of university.

Reading: Reading novels.