Deepanshu Chalia

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Education

Southern Methodist University

Master of Science in Computer Engineering

Punjab Engineering College

Bachelor of Technology in Electrical Engineering

Work Experience

The Keelworks Foundation Software Developer Volunteer

Oak Harbor, WA

July 2024 - Present

Graduation date: 2022-2024

Graduation date: 2017-2021

- Deploying a comprehensive training management application using React, Node.js, Express, and MongoDB to track course completion and streamline training processes for Keelworks.
- Forging robust connections between front-end and back-end systems to optimize data flow, ensuring a seamless user experience.
- Designing user interfaces with Figma and building reusable components with Shaden, focusing on intuitive layouts and user-centric design principles to enhance engagement.

Southern Methodist University

Dallas, TX

Graduate Research Assistant

Aug 2023 - Dec 2023

- Designed and developed visualization dashboards using React and Node.js to demonstrate applications of LLMs like LLaMA and OpenAI, showcasing their potential in predictive modelling.
- Utilizing LLMs to clean and preprocess data, significantly improving the accuracy and reliability of analysis results.
- Implemented Material UI to design an intuitive and responsive interface, ensuring consistency and ease of use across the application.
- Delivered an efficient, user-friendly system that improved data clarity, model performance, and user engagement across multiple tasks.

J.S. Auto Private Limited

New Delhi, India

Junior Developer

June 2020 - Aug 2022

- Engineered a streamlined development environment using Node.js for backend, Express for APIs, and Vercel for deployment, optimizing project workflows.
- Developed and maintained 15+ web applications with React and Node.js, cutting latency by 30% and boosting user engagement by 25%.
- Automated key data processing tasks with Python, reducing manual effort by 30% and saving 10 hours send-weekly.

Projects

Saas Platform <u>Link</u>

- Developed a SaaS platform using Next.js, Clerk, and Firebase.
- Integrated Stripe's API to enable seamless subscription management and payment processing.
- Created an AI-powered learning tool that adapts to user preferences and learning styles.

3D Object Detection

Link

- Deployed projective image processing for precise dimensioning of a box moving on a conveyor belt.
- Corrected image distortions with camera parameters and distinguished surfaces using histogram and peak detection achieving a 15% improvement in object detection precision.

Sports League Database

Link

- Engineered a web app for sports league management, supporting 500+ scheduled games and real-time updates.
- Incorporated Python and Django enhancing operational efficiency by 30%.

Skills

Programming Languages: Python, JavaScript, Java, SQL, C/C++, TypeScript

Frontend & Backend Frameworks: HTML/CSS, React, Next.js, Node.js, Flask, Express, Django **APIs & Libraries**: Axios, RestAPI, OpenAI, OpenCV, Postman, Clerk, Stripe, MaterialUI, Shadon

DevOps & Cloud Infrastructure: AWS, Kubernetes, Docker, Azure, LangChain, CI/CD

Databases & Data Management: MongoDB, Firebase, MySQL, PostgreSQL, Talend Version Control &

Development Workflow: Gitlab, VS Code, Fly.IO, Vercel