Deepanshu Chalia

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Education

Southern Methodist University   **Graduation date:** 2022-2024
Master of Science in Computer Engineering

Punjab Engineering College   **Graduation date:** 2017-2021
Bachelor of Technology in Electrical Engineering

Work Experience

The Keelworks Foundation   Oak Harbor, WA
Software Developer Volunteer   July 2024 - Present

- Deployed a comprehensive training management application using React, Node.js, Express, and MongoDB to track course completion streamline training processes for Keelworks
- Forged robust connections between front-end and back-end systems to optimize data flow ensuring a superior user experience

Headstarter Corporation   Long Island, NY
Software Engineer Fellowship   July 2024 - Aug 2024

- Constructed 5+ AI-driven apps and APIs with NextJS, OpenAI, Pinecone, and StripeAPI, attaining a 98% success rate based on 1000 user evaluations
- Led a team of 4+ engineers, implementing MVC architecture to deliver projects from inception to deployment
- Enhanced technical expertise through coaching from Amazon, Bloomberg, and Capital One, mastering Agile, CI/CD, Git, and microservices

J.S. Auto Private Limited   New Delhi, India
Junior Developer   June 2021 - Aug 2022

- Developed and maintained over 15 web applications using React and Node.js, reducing latency by 30% and increasing user engagement by 25%
- Streamlined data processing by automating key tasks with Python, cutting down manual efforts by 40% and saving the team around 10 hours of work each week

Projects

Saas Platform   **https://github.com/Headstarter-fellowship-projects/flashcard-saas/tree/Deep**

- 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

Chatbot   **https://github.com/Headstarter-fellowship-projects/ai_customer/tree/Deep**

- Developed a tailored conversational AI system employing Next.js and OpenAI
- Incorporated user authentication to enhance the user experience and employed Firebase for data storage
- Utilized AWS Bedrock API to enhance the user experience with a diverse range of features, including image generation and code building

Inventory Management   **https://github.com/chalia082/Inventory-Management-System**

- Created a inventory management application that allows users to keep track of grocery items by adding or removing items and updating their quantities
- Utilized Next.js for the frontend framework, Material UI for the UI components, and Firebase as the backend

3D Object Detection   **https://github.com/chalia082/3D-Object-Detection**

- 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   **https://github.com/chalia082/Sports-League-Database**

- 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
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, Linux