Deepanshu Chalia

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Education

Southern Methodist University — **Graduation date:** May 2024
Master of Science in Computer Engineering

Punjab Engineering College — **Graduation date:** June 2021
Bachelor of Technology in Electrical Engineering

Work Experience

The Keelworks Foundation
Software Developer Volunteer
Oak Harbor, WA
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
Software Engineer Fellowship
Santa Clara, CA
July 2024 - August 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
Junior Developer
New Delhi, India
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

Chatbot
https://github.com/HeadStarter-customer-support/ai_customer

- 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
- Embodied the 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

Software Development: Python, C/C++, Java, SQL, JavaScript, TypeScript, HTML/CSS, Bootstrap, React, Node.JS, Next.JS Flask, Express, Axios, RestAPI, OpenCV, Postman, Django

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