

Deepanshu Chalia

New York, NY | dchalia@smu.edu | 214-984-0925 | dchalia.com

Education

Southern Methodist University Master of Science in Computer Engineering	Graduation date: 2022-2024
Punjab Engineering College Bachelor of Technology in Electrical Engineering	Graduation date: 2017-2021

Work Experience

The Keelworks Foundation Software Developer Volunteer	Dallas, TX July 2024 - Present
<ul style="list-style-type: none">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 Shadcn, focusing on intuitive layouts and user-centric design principles to enhance engagement.	
Southern Methodist University Graduate Research Assistant	Dallas, TX Dec 2022 - Dec 2023
<ul style="list-style-type: none">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 Software Engineer	New Delhi, India June 2020 - Aug 2022
<ul style="list-style-type: none">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	Link
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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
<ul style="list-style-type: none">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, Shadcn
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