# Deepanshu Chalia

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# **Summary**

Fullstack Engineer with 3+ years of experience building production-grade web apps. Skilled in React, Next.js, and real-time data visualization. Expert at creating responsive, user-focused UIs, integrating with scalable APIs

# **Industry Experience**

#### Fullstack Developer Intern | WorldLink US | Frisco, TX

May 2025 - Aug 2025

Skills used - Next.js, React, Python, Flask, Qdrant, LLMs, PostgresDB, SQL, JIRA, AWS

- Boosted business user productivity by architecting an LLM-powered tool to translate plain English into actionable SQL queries.
- Enhanced data accessibility by 30% for non-technical users by developing a Qdrant vector database-powered LLM engine.
- Addressed system downtime by resolving over 50 support tickets via JIRA, successfully cutting the average resolution time by 15%.
- Engineered the complete application with a Python/Flask API, a PostgresDB backend, and a Next.js/React UI deployed on AWS.
- Partnered with data scientists to refine annotation guidelines, directly improving the accuracy and quality of core AI analytics.

## Software Developer | The Keelworks Foundation | Remote

July 2024 - May 2025

Skills used - Next.js, React, Figma, Tailwind CSS, Jest, Lighthouse, Vercel

- Drove a critical platform modernization for 500+ employees by migrating siloed legacy frameworks to a modular Next.js architecture.
- Improved key site performance metrics, achieving a 20-point increase in Lighthouse scores by rebuilding core e-learning pages.
- Accelerated feature delivery across 3 teams by creating a reusable component library and automating deployments with Vercel.

## Software Engineer | J.S. Auto Private Limited | New Delhi, India

Jan 2021 - Aug 2022

Skills used - Node.js, React, Axios, Express, Jest

- Engineered an enterprise inventory dashboard using React and Node.js for real-time tracking of thousands of automobile parts.
- Improved demand planning accuracy by 10% and cut sales report variability by 2.1% through data visualization and automation.
- Ensured application reliability and stability by authoring a comprehensive unit test suite for all critical components using Jest.

#### Education

## Master of Science | Computer Engineering | GPA: 3.6/4

May 2024

Southern Methodist University, Dallas, TX

Associations: Intelligent Systems and Bias lab, Integrated Circuits Design and Testing, Fondren library

## Bachelor of Technology | Electrical Engineering | GPA: 3.1/4

June 2021

Punjab Engineering College, Chandigarh, India

Associations: IEEE society, Voyagers (NPO), English Editorial Board

## **Projects**

E-commerce Aug 2025

Skills used - Django, Python, REST API, React, Vite, JWT, MySQL, Redis, React Context, Celery, SMTP, Heroku

- Architected a production-style e-commerce stack featuring a Django REST API, React/Vite UI, and MySQL database.
- Solved data integrity challenges during checkout by engineering an atomic order transaction flow to prevent duplicate processing.
- Slashed server response times on high-traffic pages by integrating a Redis caching layer for frequently accessed product data.
- Implemented a persistent shopping cart using React Context and backend sync, creating a seamless user experience.
- Utilized Celery for asynchronous background tasks, automating the dispatch of order confirmation emails via an SMTP server.
- Deployed the containerized Django API to Heroku and the static front-end to GitHub Pages for scalable, global access.

Document RAG system June 2025

Skills used - RAG, Ollama, Python, FastAPI, Next.js, Qdrant, PostgresDB

- Improved contextual answer accuracy by over 40% compared to base models by developing a RAG query engine with Ollama.
- Resolved unstructured data challenges by building a Python pipeline to automatically ingest, chunk, and vectorize PDFs and URLs.
- Engineered the full-stack system with a FastAPI backend and Next.js UI to support real-time, chat-based querying.
- Stored all text embeddings in a Qdrant vector database, enabling the system to perform fast and accurate semantic search.

#### **Cynsus: A Startup Platform**

Dec 2024

Skills used - Next.js, MongoDB, Tailwind CSS, Figma

- Launched a full-stack networking portal on Next.js and MongoDB to bridge the gap between entrepreneurs and investors.
- Secured the platform by implementing robust backend validation for form data and hashing all user passwords prior to storage.
- Translated high-fidelity Figma designs into a pixel-perfect, responsive UI using Tailwind CSS for a professional user experience.

#### Skills

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

Backend Frameworks : Django, JWT, Flask, Node.js,, Express, REST APIs, GraphQL, WebSockets, Docker

Frontend Frameworks : React, Vite, Tailwind CSS, Axios, NextJS, MUI, Shadon, Figma APIs and Libraries : Axios, Postman, OpenAI, OpenCV, Clerk, Stripe, HuggingFace

**Cloud Infrastructure & DevOps**: Vercel, AWS, Azure, Heroku, GitHub Pages, CI/CD, Git **Databases & Data Management**: PostgresDB, MySQL, MongoDB, Firebase, Qdrant, Redis