

Daksh lohar

Software Engineer | Full Stack & AI

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PROFILE SUMMARY

Software Engineer with **over 5 years of experience** building and scaling web and mobile applications, AI agents, and data-driven workflows. Strong background in frontend development, backend APIs, microservices architecture, and database systems (SQL, NoSQL, Vector). Experienced in Retrieval-Augmented Generation (RAG) pipelines, Generative AI integrations, CI/CD automation, and production infrastructure monitoring. Focused on system design, performance optimization, and reliable, scalable delivery.

TECHNICAL SKILLS

AI & ML Frameworks: LangGraph, LangChain, n8n, LlamaIndex, RAG pipelines, Embeddings, ChromaDB/Qdrant/Neo4j, RamaLama

Backend: Node.js, NestJS, Express, Python (Flask, Django, FastAPI), Kafka, NATs.io, Redis, REST, gRPC, WebSockets, WebRTC, Model Context Protocol(MCP)

Databases: PostgreSQL, postgres-operator, MySQL, MongoDB, TimescaleDB, Redis, ChromaDB, Qdrant (Vector DB), Neo4j (Graph DB)

Frontend: HTML/CSS, React, Next.js, TypeScript, JavaScript (ES6+), TailwindCSS, Material UI, React Native, Context API, MobX

ORMs & Query Builders: Sequelize, TypeORM, Prisma, Knex.js, Mongoose

DevOps & Cloud: Docker, Kubernetes, GitHub Actions, Concourse CI, Terraform, AWS, Vercel, Netlify, Nginx, CloudFlare, DigitalOcean

Tools & Platforms: Nx Monorepo, Shopify, Supabase, Video-SDK, Cursor-IDE, Figma, Jira, Monday.com, vault

Languages: TypeScript, Python, JavaScript, Kotlin, PostScript

EXPERIENCE

Software Engineer

Feb 2022 - Present

Wisflux Pvt. Ltd.

Jaipur

- Led end-to-end development of enterprise web applications using React, NestJS microservices, and Python servers; reduced client manual work and increased delivery quality.
- Implemented an automated on-the-fly infrastructure creation CI pipeline for GitHub actions using ARC(action-runner-controllers)
- Managed application deployments on Kubernetes, introduced monitoring, alerts, and improved incident response to reduce downtime.
- Contributed AI/automation features: vllm fine-tuning for physical contact card processing and created an AI MCP server.
- Key product contributions:
 - * **Typezap:** Built an error-prone payment system using Stripe and a competition platform with real-time leaderboard tracking(Web-sockets, Kafka); achieved strong early adoption.
 - * **Fizvizz:** Developed networking & social media mobile app with real-time updates and advanced search, resulting in measurable engagement improvements, used react-native with custom native components written in Swift and Kotlin/Java.
 - * **Checksigma:** Implemented auditing automation and dashboards; led Bosch-specific deployment and integrations to streamline audit workflows, reducing the usage of paperwork significantly.
 - * **Vybee:** Implemented an AI MCP tool that allows LLMs to retrieve the most relevant code and use context efficiently, used a graph database and vector embeddings for relations and indexing.
 - * **Autobot:** Implemented a full production-grade CI pipeline that allows developers to use any cloud provider of their choice and run and deploy their app on the fly using Terraform and self-hosted action runners.

- Developed a real-time video calling and assignment solution from scratch using WebRTC and NATs.io
- Designed and implemented the whole UI and Realtime chatting system.
- Managed application containerization, introduced layering in Docker files.
- Key product contributions:
 - * **Assignment Platform:** Built features for assignment solution finding, Sockets for event-driven interactions, and NATS as a message queue for scalable messaging.
 - * **Video Chat Application:** Delivered real-time messaging and video calling capabilities, integrating WebRTC for real-time communication, ensured a smooth user experience and optimal performance.

PROJECTS

Vybee: AI Coding MCP Tool

2025

Worked on building an AI MCP tool that provide rich and most relevant code base with indexing, relational chunk database.

- Created parser for different code languages and frameworks.
- Implemented semantic chunking of code base from parse trees.
- Implemented embedding invalidation mechanism based on git work-tree.
- **Technologies:** Typescript, Tree-sitter, Neo4j, OpenAI, MCP

SourceGround: The Open-Source NotebookLM

2025

Developed a source chatting AI platform allowing users to talk to different kinds of sources, PDF, Markdown, and links

- Implemented the notebooklm feature-based open-source web app using LangChain and React.
- Implemented multiple notebooks feature and different source parsers using pymupdf, crawl4ai, etc.
- Implemented source summarization feature using LangChain agent and LLM.
- **Technologies:** React, LangChain, Qdrant, crawl4ai, Ollama, Python FastAPI, pymupdf

PDF Editor

2024

An advanced web PDF editor like Bluebeam, Adobe Acrobat, that allows users to embed different shapes, text using PostScript.

- Developed an open-source **npm package** that allows developers to embed shapes, text, and other annotations of PDF using a simple, and easy API.
- Implemented custom fabric.js objects with their own geometric functions, allowing custom shapes and text styles.
- Implemented Canvas system allowing users to draw annotations directly on top of the PDF preview, using a reverse coordinate system and canvas.
- Implemented a PDF viewer using the Mozilla source PDF.js package, allowing the user to view, scale, and navigate pages.
- Implemented fabric and PDF annotation for text with character-level styling in PostScript.
- **Technologies:** ReactJS, Fabric.js, Canvas, PostScript, Docker, PDF Ref. 1.7, PDF.js

Fizvizz: Networking & Knowledge Sharing App

2023

Cross-platform platform for professional connections, messaging, and knowledge exchange.

- Built the contact card digitization feature allowing conversion of physical card into digital.
- Designed the scalable file management system for user post, profile and photo sharing with caching.
- **Technologies:** React Native, NestJS, PostgreSQL, Redis, Kafka, WebSocket, Gemini Nano, react-native-vision-camera

Checksigma: Auditing & Automation Tool

2022 – 2023

Modular auditing workflows and dashboards for industry-specific deployments.

- Architected a configurable workflow engine, KPI dashboards, and reporting features for audit teams.
- Led integration and deployment for a Bosch plant in Jaipur, improving operational audit efficiency.
- **Technologies:** React, NestJS, Python, PostgreSQL, Redis, Nx, Docker, Kubernetes

EDUCATION

Poornima Institute of Engineering and Technology

Bachelor of Technology in Computer Science and Engineering

2019-2023

CGPA: 8.35

Govt. Senior Secondary School, Nimbahera

Rajasthan Board of Secondary Education (R.B.S.E)

2019

Percentage: 82

INTERESTS

- Open-source contributions, learning & explore about new tech-stacks.
- listening to rap Music, web surfing, and discussions.
- **Volunteering:** Participated in the Smart India Hackathon (2022), Part of team for Library Management System for college, part of an aeromodelling club.