Vineet Agarwal

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Summary — Software Engineer with 2+ years of experience developing scalable web and mobile applications across distributed systems. Proficient in Python, React Native, and AWS. Experienced in the full software development lifecycle (SDLC) including design, development, testing, and deployment. Passionate about building efficient, cloud-native solutions and solving complex challenges through innovation and data-driven engineering.

Skills

Languages Python, JavaScript, TypeScript, C++, C, SQL

Frontend React.js, React Native, Next.js, Vue.js, HTML5, CSS3, Tailwind CSS

Backend Node.js, Express.js, RESTful APIs, gRPC, WebRTC

Databases MongoDB, PostgreSQL, Faiss, Pinecone, Redis

DevOps AWS, Azure, GCP, Docker, CI/CD, Serverless

AI/ML LangChain, OpenAI APIs, RAG, Hugging Face

Core CS Data Structures & Algorithms, System Design, Software Architecture, Embedded Systems, OOP

Tools Firebase, Git, Selenium, Redux Toolkit, Pytest

Experience

Svipes **Jul 2024 – Dec 2024**

Full Stack Developer

- Developed a cross-platform social media app with 50+ interactive screens using React Native and Redux Toolkit.
- Enhanced performance by 30% through state optimization and asynchronous rendering strategies.
- Implemented reusable UI components from Figma designs, improving code maintainability and scalability.

Xelpmoc Design and Tech Limited **Nov 2022 – Apr 2024**

Software Developer

- Built 30+ responsive React Native screens for the GreenLight Credentials Wallet App (iOS & Android), integrating 15+ blockchain webhooks.
- Developed two mobile apps for an old-age home community supporting 50+ residents and 20+ staff, improving coordination and efficiency by 35%.
- Architected a tourism services app using React/React Native, cutting bugs by 40% and boosting development speed by 25%.
- Engineered an interview management platform using WebRTC and sockets, scaling to 100+ concurrent video sessions with ¡200ms latency.
- Optimized SQL queries and caching, reducing query latency by 86% (from 75s to ¡10s) and improving API throughput by 4x.
- Practiced Agile methodology, participated in sprint planning, testing, and end-to-end delivery of production-ready features.

IIIT Hyderabad **Jun 2022 – Aug 2022**

Summer Internship

- Automated multilingual data extraction using Python and Selenium to curate datasets for regional-language Wikipedia contributions.
- Processed and cleaned 100+ articles, collaborating with researchers to enhance NLP-based emotion classification accuracy.

Education

University of Maryland, College Park

Master of Engineering , Computer Software Engineering *January 2025 - December 2026*

Minor in Cloud Engineering

Relevant Coursework: Software Design, Cloud Computing, Virtualization, Cloud Security

Projects

AI Chatbot for Plywood Business **Sept 2025 – Present**

- Built an internal assistant using LangChain, OpenAI, and FAISS to automate product info queries.
- Managed data ingestion, embedding, vector store, and prompt design.

Collaborative AI Whiteboard (CollabDrawAI) **Jun 2025 – Present**

- Building a real-time collaborative drawing application with an infinite canvas and multi-user editing.
- Implemented live presence, cursors, and stroke/shape broadcasting over WebSockets; batched events for smooth rendering and lower network overhead.
- Tech: React, TypeScript, Canvas API, Node.js, WebSockets. Persistence and authentication under development