

Work Experience

Senior Software Engineer - Wishlink Gurugram, India **Feb 2024 – Present**

Wishlink is enabling creator driven commerce. Leading the Wishlink shopping app team, focused on performance, personalized recommendations and innovative features through continuous user experiments. Worked on the following.

- Build the *user behavior tracking and recommendations pipeline* to handle 100 million recommendations gen per day, employing various SQL and AI/ML models for both batch and real-time training and inference.
- Revamped the *startup and reel player* code, performing various FE/BE optimizations, reducing P50 time of *app open to first reel play* from 6.5s to 2.3s, reducing initial user dropoff from 20% to mere 2%.
- Led migration of high-throughput data from PostgresDB to Redis, saving many nightly hours in daily DB writes for batch recommendations, enabling real-time updates, and significantly improving API response times.
- Built robust APIs and backend infrastructure powering core features such as the *for you* page, *explore* page, *similar products*, and *user authentication*, ensuring scalability, performance and reliability.
- Led efforts to port the web app from a legacy client-side React to Next.js using server components and SSR, resulting in snappy load times, first paint time decreasing from seconds to milliseconds.

Software Engineer - Memorang Los Angeles · Remote **Oct 2023 – Feb 2024**

Memorang provides education organizations with an end-to-end platform to build AI-powered learning experiences.

- Actively engaged in the engineering and practical implementation of AI-powered applications, employing prompt engineering and machine learning techniques to enable Memorang to launch their AI stack for educators and orgs.

Software Developer - Equilibrium Helsinki, Finland · Remote **Nov 2021 – Jul 2023**

At Equilibrium, a leading firm in decentralized web infrastructure, I significantly contributed to these projects:

- XRPL Hooks IDE is a comprehensive web-based platform for developing, deploying, and inspecting XRPL smart contracts. I spearheaded the team in the creation of a robust and efficient IDE designed to handle complex tasks.
- Ziggurat offers multiple networks with several stability layers. I developed the visualizations module and deployment CI pipelines, and revamped the user experience, significantly increasing user engagement.
- HookScript, a forthcoming language like TypeScript for XRPL smart contracts. I played a key role in building the first compiler infrastructure and efficient tooling, leading to a 3x boost in developer productivity.

Freelancing Consultant Srinagar · Remote **May 2021 – Nov 2021**

Proficient professional with expertise in executing complex projects and delivering outstanding outcomes, including:

- Created a fully peer-to-peer video-calling/streaming Electron-based cross-platform desktop app, using RTMPS, WebRTC & FFMPEG. This app handled all the heavy lifting on the client side, making it a highly scalable solution.
- Played a key role in the development of an Audiogram generator for Jingle.fm, enabling all heavyweight audio computation to be performed in-browser using Web Assembly.

Technologies and Languages

- Languages: TypeScript/Javascript, Python, C/C++, Golang, Rust, Swift & my upcoming untitled language!
- Technologies: Django, NodeJS, React/Native, NextJS, Postgres, Redis, DevOps, AI/ML, Cloud, Blockchain, etc.
- Tools: Git, Bash, Jenkins, VSCode, Docker, Grafana, Kibana, Figma, Xcode, Android Studio, Linear, etc.

Education

- **Bachelor of Technology, Civil Engineering**, National Institute of Technology, Srinagar **July 2018 – Dec 2020**

Projects

- **Super Starter** - Modern mono-repo template using Turborepo, Drizzle/Postgres, Auth.js, shadcn/ui, TRPC and more.
- **Mooz** - WebRTC app for p2p video conferencing with video, screen, and text data over a scalable mesh network.
- **MCcalculator** - a Web port of Microsoft Calculator, using compiling C++ with WebAssembly to run on all platforms.