

Tushar Selvakumar

Frontend Engineer | Platform Architect

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Professional Summary

Frontend engineer with 2+ years building developer-facing platforms, documentation tooling, and AI-powered interfaces. I care deeply about the quality of software I ship — building systems that are extensible, well-documented, and delightful to use. Active open-source contributor with production-grade projects deployed on Vercel with real users and community engagement.

Technical Skills

Frontend: Next.js, TypeScript, React, Tailwind CSS, Astro, Vite, shadcn/ui, TanStack Query, TanStack Router, TanStack Start, Recharts

Cloud / Infra: Vercel, Cloudflare, GCP, Supabase, PostgreSQL, PGVector, Bun, Hono, CI/CD

AI / Search: RAG, semantic search, embeddings, LLM integration

Tools: Git, Firecrawl, Sentry, Playwright, Biome, TurboRepo

Professional Experience

AI Squared

Software Engineer (SDE-1)

Bangalore, India

May 2024 – Present

- Architected and implemented AI Squared Assistant powering chat interactions for Sparx, enabling users to generate charts and tables using natural language and becoming a core feature for all Sparx customers.
- Designed the Assistant system for extensibility to support additional output types (such as images and videos) while prioritizing reliability via deliberate tradeoffs between streaming and one-shot generation.
- Onboarded and enabled frontend engineers to build on the Assistant platform and served as primary reviewer and point of contact for Assistant-related changes as the team extended the architecture to support streaming.
- Built a modular React integration system using a single JavaScript entry point, allowing external teams to ship POC features without changes to the core codebase and significantly improving development velocity.
- Implemented custom role-based access control (RBAC) UI with fine-grained policy definitions, platform white-labeling for organizations and workspaces, and secure API access for custom data apps.
- Led engineering execution for the BCLL POC and supported Vanguard and NASA initiatives, delivering solutions such as the SalesOps Assistant, Space Cadet POC, and Model Health Dashboard under real-world constraints.
- Collaborated closely with backend and design leads to translate product goals into user-centric flows, iterating on UX and driving alignment on technical direction.

- Advocated for and integrated Recharts to improve data visualization in AI Squared's BI tool (Data Apps), enhancing reporting and analytics capabilities.
- Built the AIS Docs Chatbot using Firecrawl and RAG, deployed on the product documentation site and Slack, improving documentation accessibility and internal productivity.
- Authored runbooks for POC model endpoints and improved monitoring and alerting, strengthening operational readiness and reliability.

Multiwoven

Software Engineer Intern (Founding Team)

Bangalore, India
Dec 2023 – May 2024

- Contributed to the initial UI of Multiwoven, an open-source reverse ETL platform, building core modules across the data pipeline and connector configuration flows in React and TypeScript.
- Helped establish the foundational frontend architecture — component structure, routing, and state management patterns — that the broader team built upon as the product scaled.

Open-Source Projects

Draw | draw.macintushar.xyz | github.com/macintushar/draw TypeScript, React, Tailwind, shadcn/ui

- Digital drawing tool to create, edit, and sync drawings across devices; 82 GitHub Stars, 20 forks, and active external contributors.
- Deployed on Vercel with Docker self-hosting support; wraps Excalidraw with a Supabase-backed auth and storage layer for cross-device persistence.
- Built with Vite, TanStack Query and Router, Sentry for monitoring, and Bun — demonstrating a full production-grade open-source release cycle.

Curiosi | curiosi.xyz | github.com/macintushar/curiosi TypeScript, TanStack Start, Astro, React, Bun, Hono

- Open-source personal AI Drive — upload files, index them with AI, and retrieve information via natural language queries and AI-generated answers.
- TurboRepo monorepo with a TanStack Start platform UI, Astro-based docs/landing site, and a Hono worker communicating via a message queue (QStash/bunqueue).
- Uses better-auth for authentication, Biome for linting and formatting, and Playwright for end-to-end test coverage.