Muhammad Usama Shahid

PRINCIPAL SOFTWARE ENGINEER

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Principal Software Engineer with 8 years building full-stack web applications across a range of products and client teams. Comfortable owning work from architecture through to production. Recent projects include leading the UI/UX redesign and component library for a landscape-design SaaS, and building a community-solar member portal single-handedly on Next.js and React with a custom Odoo/Python backend, Stripe payments, and utility-data integrations. Also built a text-to-speech service, now used across the company, that sits on top of five different providers. Works confidently on both the front end (Angular, React/Next.js) and the back end (Node.js, NestJS, Python), and cares about clean code and keeping apps fast.

EXPERIENCE

Principal Software Engineer (promoted from Senior Software Engineer, May 2025)

Dec 2021 – Present

Mavric (formerly Devigital Systems) · Remote (US-based company)

Product Ownership & Technical Leadership

- Promoted to Principal in May 2025, with ownership of architecture, UI/UX direction, and delivery across several client products.
- Set the engineering standards and make the key technical calls on my projects, working directly with stakeholders and the design and QA teams.

Siteplan — UI/UX Redesign & Frontend Modernization (Structure Studios)

- Own and implement the refreshed UI/UX of the Siteplan web app, extending its existing component library with 25+ new components (50+ in total) and keeping theming, dark mode, and shared styles consistent.
- Built the app's data-heavy grids with AG Grid Enterprise (server-side data, filtering, multi-select, bulk actions) and handled state reactively with RxAngular.
- Integrated Google Maps and in-app PDF viewing, and set up session-based auth with role-based route guards.

MCPC Member Portal — Full Ownership (Maine Community Power Cooperative)

- Sole developer and owner of a full-stack member portal for a community-solar cooperative, from the first commit to production.
- Built the frontend in Next.js 15 and React 19 (TypeScript, React Query, Tailwind, Storybook) on AWS Amplify, backed by a custom Odoo 18 / Python module that exposes a REST API.
- Handled Stripe payments in full: card and ACH tokenization with SetupIntents, saved-card payments, and an auto-pay cron for recurring invoices.
- Integrated Bayou Energy for utility data through a webhook pipeline that keeps bills and meter readings in sync, and built Google OAuth sign-in, email/OTP two-factor auth, and a multi-step onboarding flow.
- Set up the staging and production environments, the Amplify builds, and the Odoo.sh deployment process, and wrote the full handoff documentation for the project.
- Also built a standalone Next.js calculator that lets prospective members compare electricity costs and savings.

AI · Text-to-Speech

- Built a shared text-to-speech service for the company that wraps five providers (OpenAI, Google Cloud, AWS Polly, ElevenLabs, and Deepgram) behind a single interface.
- Supported both full and streaming synthesis, so other teams can switch providers without touching their own code.

Earlier Projects

- **Lagomint** (NFT platform): built the Web3 integration layer, covering smart-contract calls, MetaMask wallet connection, and the minting flow.
- **Climate Club** (carbon-footprint tracking): built features across a Next.js front end and a NestJS/PostgreSQL back end as a core team member.
- **LiveSmarter Media**: kept a legacy platform running and extended it for about a year, working in an older XSL/XSLT and injected-JavaScript codebase.

Engineering Practices & Performance

- Work with an AI-assisted development process (Claude Code), paired with a structured review of AI-written code and a manual final pass, so moving fast never comes at the cost of correctness or quality.
- Push for solid code quality and refactor toward simpler, lower-complexity code using functional-programming ideas.
- Improve performance with debounced API calls, tighter state management, and responsive layouts that hold up across devices.
- Design and tune CRUD and analytical queries across SQL and NoSQL databases, using ORMs where they help.
- Use AWS Lambda for event-driven and scheduled tasks to keep infrastructure light.

Software Engineer (promoted from Associate Software Engineer) — Oct 2018 – Dec 2021

eBricks Inc — Mesmer, Lahore

- Started as an Associate Software Engineer on Mesmer, a real-device mobile-testing platform, fixing bugs across the Node.js backend while learning the product. Worked in Scrum from the start, alongside the QA and UI teams, with JIRA for tracking.
- Grew into building full features across the Angular web app and the Node.js/Express backend.
- Designed and built a chunked file-upload feature (Node.js, Multer, Amazon S3) that got past size limits and survived dropped connections, with pause and resume for large uploads. Also added single and bulk (multi-file) downloads.
- Built real-time features such as live in-app notifications, using WebSockets between the services and the web app.
- Worked heavily in MongoDB: writing aggregation pipelines, tuning queries with projection and indexing, and setting up triggers.
- Debugged production and staging issues on services running in AWS ECS.
- Wrote server-side tests with Jest and worked in Agile/Scrum, tracking tasks and bugs in JIRA.
- Promoted to Software Engineer in year two.

TECHNICAL SKILLS

Frontend	Angular · React.js · Next.js · TypeScript · JavaScript · RxAngular · React Query · AG Grid · Tailwind CSS · SCSS · HTML5 · Storybook
Backend & APIs	Node.js · NestJS · Python · Odoo · REST API · Express.js · WebSockets
Cloud, Data & Integrations	AWS Lambda · AWS Amplify · Amazon S3 · AWS ECS · MongoDB · PostgreSQL · Stripe · OAuth2 / OIDC · Google Maps · Web3 · MetaMask · Git
AI / Voice	Text-to-Speech (TTS) · OpenAI · Google Cloud · AWS Polly · ElevenLabs · Deepgram

EDUCATION

BS Information Technology — Aug 2014 – Aug 2018

PUCIT, University of the Punjab, Lahore

STRENGTHS

Product Ownership · Technical Leadership · Team Collaboration · Problem Solving · Adaptability · Attention to Detail

LANGUAGES

English