Raviteja Manchala

Staff Software Engineer

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PROFILE

Software engineer with 10+ years across product engineering, system architecture and technical leadership. My strongest foundation is JavaScript/TypeScript, backed by Node.js, Python, cloud delivery and real-time applications. I have led delivery at Akixi, contributed to financial-services and clinical programmes at Quinnox and built AI products through VisionGrid.

CORE COMPETENCIES

- **Architectural judgement** I decide where to draw system boundaries, how data moves and which abstractions will survive changes in product scope.
- **Technical influence** I guide engineering through architectural reviews, mentoring and shared delivery standards—not only my own implementation work.
- **Service contracts** I bring Node.js/Python services, API contracts and complex application workflows into a coherent architecture.
- **Distributed processing** I separate synchronous workflows from queue-based jobs, background processing and model inference.
- **System performance** I trace bottlenecks across queries, APIs, caching, payloads and browser rendering before choosing a fix.
- **Production discipline** I treat CI/CD, AWS operations, deployment quality and fault handling as engineering responsibilities.
- **TypeScript depth** JavaScript/TypeScript is my strongest foundation across systems integration, application architecture and reusable engineering foundations.
- **AI product engineering** I turn computer-vision and LLM capabilities into real-world workflows involving annotation, review and human decision-making.
- **Engineering standards** I improve consistency through Storybook, design systems, accessibility reviews, automated tests and reusable components.
- **Business context** I have delivered in CX analytics, clinical operations, care management, finance and enterprise environments.

TECHNICAL SKILLS

Architecture	System design, service boundaries, API contract design, event-driven and queue-based architecture, asynchronous processing, multi-tenant design, caching strategy
Technical leadership	Architecture reviews, technical direction, engineering standards, mentoring, distributed teams, release quality, Agile delivery
Languages & runtimes	TypeScript, JavaScript (ES6+), Node.js, Python, SQL
Services & data	NestJS, Express, FastAPI, REST, GraphQL, WebSockets, PostgreSQL, DynamoDB, Redis, Kafka, RabbitMQ, SQS/SNS, BullMQ
Cloud & reliability	AWS (Lambda, ECS, EC2, S3, SageMaker), Docker, Kubernetes, Terraform, CDK, CloudFormation, CI/CD, production support and monitoring
Performance	Query and API latency analysis, payload optimisation, caching, browser rendering cost, Webpack build optimisation
Security & compliance	Tenant isolation (PostgreSQL RLS), RBAC, TOTP MFA, hash-chained audit trails, Microsoft Entra ID
Frontend platform	React, Next.js, design systems, Storybook, WCAG accessibility, reusable component architecture
Applied AI	LLM integration, LangChain, computer vision (SAM, OpenCV), Hugging Face, async model inference

EXPERIENCE

Senior Developer Oct 2025 – Oct 2026

Akixi

- Worked on CX Analytics, CX Score, CX Record and CX Integration, spanning customer-experience analytics, reporting, recording and connected product workflows.
- Led a distributed engineering team through feature delivery, technical reviews, deployments and release quality across application and backend concerns.

- Contributed to Node.js and Python service integration, asynchronous processing and the APIs supporting React/Angular consumers.
- Investigated query/API latency, caching decisions and frontend rendering cost to improve day-to-day product responsiveness.

Founder & CTO
Jan 2025 – Present

VisionGrid Ltd · *independent venture*

- Architected VisionGrid Studio end to end, including React/TypeScript interfaces, Node.js and Python services, GraphQL, WebSockets, PostgreSQL and S3 asset flows.
- Designed background inference and labelling jobs around message queues, keeping slow model processing off interactive request paths.
- Integrated SAM segmentation and LLM APIs into review and annotation experiences for assisted labelling.
- Owned AWS container deployments, infrastructure-as-code, CI/CD and technical direction for the product.

Lead Consultant
May 2025 – Oct 2025

Quinnox

- Worked on CPL Genesis clinical workflows and enterprise financial-services programmes, balancing business requirements and implementation architecture.
- Contributed to enterprise integration approaches using REST, GraphQL, WebSockets and webhook-driven workflows.
- Led architecture reviews, Webpack/build optimisation, mentoring, accessibility and reusable application standards.
- Project portfolio included a Calypso hedge-fund production-support engagement covering derivatives, reconciliation, release upgrades and BAU monitoring.

Senior UI Developer
Oct 2023 – Jan 2025

CACI

- Led engineering delivery across enterprise engagements including BMW and care technology associated with Certa.
- Created reusable component architecture that reduced feature development time by 30% and supported consistent application delivery.
- Managed a team delivering 25+ story points per sprint and contributed to testing, accessibility, integration and release readiness.
- Worked across React, Next.js and other existing applications with performance and responsive-product requirements.

Frontend Lead
Aug 2021 – Oct 2023

DeepEdge

- Led the architecture of a computer-vision data platform using React/Redux and a modular HTML Canvas graphics and interaction engine.
- Built interactive workflows for navigating and annotating large volumes of image data used by machine-learning researchers.
- Worked with Node.js service APIs to optimise payloads and improve data-heavy performance; led accessibility and performance reviews.

Frontend Developer
Oct 2019 – Aug 2021

Phenom

- Built reusable, white-labelled careers portals serving Microsoft and Centene using shared product architecture.
- Contributed to migration from Angular to React, delivering a reported 40% performance improvement.
- Implemented CI/CD pipelines, analytics instrumentation and UI consistency improvements across branded sites.

UI Developer
Oct 2018 – Oct 2019

JNET Technologies

- Developed responsive React/JavaScript applications integrated with REST services; improved cross-browser behaviour and application performance.

Earlier career UX Specialist, Azri Solutions (Nov 2017 – Jul 2018); UI Designer, MUC Technologies (Mar 2015 – Aug 2017).

SELECTED PROJECTS

Akixi CX Suite — CX Analytics, CX Score, CX Record, CX Integration

Akixi · Node.js · Python · APIs · asynchronous processing

Delivered across a product suite for analysing customer experience, scoring interactions, recording and platform integrations. Worked at the boundary between application flows, data services and releases, including investigation of caching, API latency and performance.

Calypso hedge-fund support platform

Quinnox · commodity/equity/credit derivatives · fixed income · FX

Enterprise project covering L2/L3 production support, reconciliation, on-demand reporting, workflow administration, regression testing, patches and application upgrades. The project solution included a Java-based monitoring tool, reporting dashboards and engine-service job monitoring for uninterrupted BAU operations.

CPL Genesis — clinical workflow platform

Quinnox · React · Mantine · React Query · SSR

Built enterprise clinical workflows with reusable accessible components, application state/data fetching, server-side rendering and integrations for AI-assisted search and analytics. Worked on application architecture, performance and reusable delivery patterns.

Certa — care management software

CACI · cloud-managed care platform

Care platform for planning, scheduling, delivering and evidencing services, with operational visibility for providers and stakeholders. Engineering experience at CACI also covered enterprise integration, reusable components, accessibility and application delivery.

BMW — enterprise client engagement

CACI · application architecture · reusable components

Contributed to enterprise digital product work and shared engineering patterns. At CACI, component-library work supported a 30% reduction in feature implementation time, with team delivery exceeding 25 story points per sprint.

VisionGrid Studio — AI annotation and review

Independent venture · TypeScript · Python · GraphQL · WebSockets · PostgreSQL · AWS

Built real-time collaborative review tools and modular annotation workflows with SAM-assisted segmentation. Designed queue-backed model inference, API/service integration, S3 assets and containerised AWS delivery.

DeepEdge AI platform — visual research tools

DeepEdge · React · Redux · HTML Canvas · Node.js

Led modular Canvas interactions for reviewing and labelling large image collections. Optimised API payloads and rendering behaviour for data-intensive researcher workflows.

Microsoft & Centene careers portals

Phenom · React · shared component architecture

Delivered branded portals from shared application foundations, maintaining brand flexibility across deployments. Contributed to a React migration that improved performance by 40%.

ClinicFlow UK — multi-tenant healthcare MVP

Independent project · Next.js · PostgreSQL · Stripe · WebAssembly

Built appointment, referral, consultation, invoicing and insurer-claim workflows. Implemented PostgreSQL row-level tenant isolation, RBAC, TOTP MFA, hash-chained auditing, verified Stripe webhooks and on-device speech-to-text using Whisper/WebAssembly.

Cygnam Cloud — administration platform

React · Redux · Next.js · Tailwind CSS

Built cloud-based administration workflows with real-time updates and server-side rendering to improve responsiveness, SEO and platform usability.

BC Portal & Nardagani — platform modernisation

Angular · Angular Material

Modernised existing enterprise portals for mobile use, accessibility and faster responsiveness through lazy loading and performance tuning.

AWARDS

Best Employee of the Year CACI | **Midnight Juggler** Quinnox | **Employee of the Month** JNET Technologies

EDUCATION

BTech, Mechanical Engineering 2014

St. Ann's College of Engineering & Technology (JNTUK), India

ADDITIONAL

Availability Immediate; right to work in the UK without sponsorship.

Interests Cricket (player), weightlifting, chess