

Kraig Jacobson

Staff Software Engineer | Platform and Developer Experience

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11 years building and running production systems end to end, from Kubernetes through to the browser. At NCR Voyix I built the developer platform the self checkout organization runs on, and am a named inventor on the resulting US patent application. I own the primary UI repository and led the AI adoption pilot the company is rolling out as its engineering standard. Before that I founded a SaaS product, sold it, and then ran engineering as Director for the company that bought it. I like the problems that sit between teams, where the real cost is friction nobody owns.

EXPERIENCE

NCR Voyix (formerly NCR Corporation) · Senior Software Developer

October 2021 to present · Remote · ~13,400 employees worldwide

Global enterprise retail and self checkout platform.

- **Cut developer environment setup from about a week to a single command, and reconfiguration between environments from several days to the same.** Built the internal developer platform for the self checkout stack.
 - Reconfiguration was the more consequential of the two. The cost was high enough that engineers worked inside their own service rather than across the product, so removing it let teams treat the platform as one product instead of several.
 - **Named inventor on the resulting US patent application, filed March 2026.**
 - Linux, macOS and Windows, on arm64 and x86_64.
 - Now standard tooling across engineering, and used by software architects, team leads, product owners and department managers to check live product state without deep technical knowledge.
- **Cut full regression suite runtime 58%, from 12 hours to 5,** by re-architecting it from UI driven to event driven against the MQTT event stream and removing every fixed sleep. Runs as one configurable Kubernetes container against any environment, sustaining 5,000 transactions of 5 items each across self checkout lanes.
- Code owner of the primary UI repository. Review every change that lands in it.
- Delivered a full feature epic for a major new European client with a 4 person AI adoption pilot team (3 engineers and a product owner), against comparable epics staffed at roughly 4 times the headcount. NCR Voyix is now standardizing engineering teams org-wide on the working model that pilot produced.
- Presented internally on applied AI practice, arguing for using models to generate deterministic tooling rather than to produce output directly, so delivery gets faster while outcomes stay 100% reproducible.
- Own CI and CD pipelines and the test automation they run: unit suites, end to end coverage, and the containerized environments both execute against.
- Profiled and optimized performance across the frontend and backend, identifying bottlenecks that crossed team boundaries and removing the manual steps behind them.
- Interview candidates and contribute to hiring bar and debrief decisions. Lead technical work across teams without formal authority, and present to leadership and non technical stakeholders.
- On call for the platform. Have acted as incident commander, write RFCs that other engineers review, and mentor both formally and informally.

React · Redux · Go · Kubernetes · k3d · Helm · GCP · Artifactory · MQTT · Redis · Postgres

Daysmart Software · Director of Software Development

January 2019 to January 2021 · Ann Arbor, MI · ~80 person company

- Hired to run engineering for the product I had founded, after Daysmart acquired PupKeep. Led a team of 7 building and maintaining the SaaS platform.
- Owned product and architecture decisions alongside code review and test strategy. Introduced automated testing with Cypress and Jest.
- Found and cut waste in the development cycle, shortening the path from written to shipped.

Node · Angular · TypeScript · MongoDB · MySQL · AWS Lambda · Twilio · Jenkins

PupKeep · Co-founder and Developer

August 2017 to January 2019 · Charlotte, NC

- Co-founded a SaaS platform for pet care service companies and **negotiated its sale to Daysmart Software**.
- Designed and shipped the product end to end: REST API, real time features over Socket.IO, payment and SMS integration, database design, and server operations.
- Also ran the parts engineers usually never touch. Marketing and SEO, sales and support, pricing, taxes and regulatory work, and the acquisition contract itself.

Node · Angular · MongoDB · MySQL · Express · Socket.IO · Twilio

Red Ventures · Software Developer

April 2018 to November 2018 · Charlotte, NC

- Delivered internal tooling on the employee intranet in Go and Node.

Vallen Distribution · Software Developer

March 2017 to April 2018 · Charlotte, NC

- Extended a procurement platform for industrial materials and tooling serving manufacturing customers.

Eli Kirk · Software Developer

July 2015 to March 2017 · Provo, UT

- Developed marketing interfaces for Micro Focus and SUSE Linux under an outsourced engineering contract, including the Digital River eCommerce integration behind SUSE server rental and support.

SELECTED PROJECTS

DreamRunner · AI interactive fiction platform

- A production consumer platform with paying users, built and operated end to end. Nuxt 3, Vue 3 and TypeScript front to back, with a Socket.IO generation pipeline streaming progress to the client in real time.
- Multi provider LLM routing with per model cost accounting, automatic failover, and content filter handling. Image generation through a swappable adapter layer, and text to speech across several engines including zero shot voice cloning served from RunPod GPU endpoints.
- Deliberately local first: user created content lives only in the browser in IndexedDB and is never persisted server side, so the privacy guarantee is enforced by the design rather than by policy.
- Runs on 2 Kubernetes clusters with Helm, Stripe and PayPal billing, 17 localized languages, Playwright and Vitest suites in CI, and Grafana, Sentry and Umami for observability.

Voice and speech infrastructure

- FastAPI service exposing Qwen3 TTS voice cloning on RunPod compatible GPU endpoints. Public at github.com/kraigjacobson/qwen-tts.
- Containerized deployment tooling for diffusion model training and image generation pipelines.

SKILLS

Languages	TypeScript, JavaScript, Go, Python, Java, C#, PHP, C
Frontend	React, Redux, Vue, Nuxt, Angular
Backend	Node, Express, REST, gRPC and Protobuf, WebSockets, Socket.IO, MQTT, RabbitMQ
Data	Postgres, MySQL, MS SQL Server, Oracle, MongoDB, Redis, Prisma
Google Cloud	GKE, Cloud Run, Cloud Build, Artifact Registry, Pub/Sub, Cloud SQL, Cloud Storage, Secret Manager, BigQuery, Cloud Logging and Monitoring, IAM including service accounts and workload identity, VPC and load balancing
Cloud and DevOps	Kubernetes, k3d, Helm, Docker, AWS (Lambda, Serverless), DigitalOcean, Artifactory, Linux administration
CI and CD	GitHub Actions, Jenkins, containerized build and deploy pipelines, release automation
Test automation	End to end (Playwright, Cypress), unit and integration (Vitest, Jest), event driven load and endurance suites in Kubernetes, chaos engineering
AI and ML	LLM integration and cost control, text to speech and voice cloning, image generation, RunPod GPU serving, model training pipelines
Security	OAuth2 and OIDC, SAML, mTLS, threat modelling, SAST and DAST tooling (Snyk, SonarQube, Trivy), secrets management
Practice	Performance profiling front and back, developer tooling and internal platforms, cross platform and cross architecture builds, interviewing, incident command, RFC authoring, mentoring

EDUCATION

Utah Valley University, B.S. Information Systems, emphasis in Data Security, 2016. Minor in Business Management.