

Nausher Rao

Senior Software Engineer · Product & Technical Leadership · Founder · Live Events & AV

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Education

Wilfrid Laurier University

Honours BSc Computer Science w/ Applied Mathematics Option

Waterloo, ON

Sept. 2019 – Apr. 2024

Experience

Mappedin

Senior Software Engineer

Waterloo, ON

Mar. 2026 – Nov. 2026

- Owned **Blue Dot & indoor positioning** as sole dedicated engineer and PM (roadmap, releases, customer requests); took **23 features** from scoping to release, plus **100+ fixes**, on Mappedin Web (**~4M monthly sessions**) for **LAX, Simon Property Group, and AT&T Stadium**.
- Saved a churning **\$250K ARR** account with one of the EU's largest property managers: spent a short-notice week on-site deploying beacons and building a native app to fix weak Android positioning, reaching **sub-5m accuracy** with and without beacons.
- Product-managed the **Visual Positioning System (VPS)** for **MLB** ballparks and airports (Miami, Calgary, Ottawa), bridging its sole developer, customers, and CS; shipped fixes raising localization success by **up to 30%** for **30K+** monthly users; integrated third-party IPS providers.
- Built **sensor-fusion** positioning models (EKF, PDR) over IMU, barometer, GPS, camera, and LiDAR data, parts of which reached production, and a **VIO/ARKit** proof of concept for **PepsiCo** tracking drivers' in-store paths and dwell time, a capability new to Mappedin.
- Redesigned Blue Dot and wayfinding for next-gen Mappedin Web (live with select customers), designing out **hundreds of user-reported issues**, and delivered Blue Dot foot-traffic and navigation analytics to customers, supporting **renewals and expansions**.
- Cut Mappedin Web's median **CI time from 30 to 10 min** (GitHub Actions, Jenkins, on-prem runners) to speed releases; rolled out spec-driven development (OpenSpec, ADRs) and AI agent rules and skills across **11 repos**, including the SDK all of engineering works in.

Konfer

Founder & Chief Executive Officer

Waterloo, ON

July 2024 – Present

- Directed a **14-person core team** and **43 volunteers** to launch SpurHacks in three months using **Waterfall critical path planning**, reaching **1,400+ attendees, 291 project submissions**, and **\$100K+ in prizes** – Canada's largest in-person hackathon by project submissions.
- Managed a **\$350K+ budget** and full life-cycle operations (staffing, scheduling, partners, risk, retros); led stage management for all ceremonies.
- Partnered with an external creative studio to produce a full digital media campaign **generating 5M+ impressions within two months**.
- Led the event platform (**React, TypeScript, Go**) via **Agile sprints and code reviews** for applications, ticketing, scheduling, and networking.
- Ran a 120,000 sq. ft. venue build-out at the RIM BlackBerry Campus with Colliers and contractors (renovations, Wi-Fi, broadcast AV).

SPUR Innovation Center

Project Manager – Incubation, Events & Operations, and Technical Development

Waterloo, ON

Sept. 2024 – Oct. 2025

- Managed **\$1M+ startup investment funding**: evaluated **50+ companies**, selected **15 ventures**, and ran financial reviews and OKR alignment.
- Drove 12 of 15 startups to hit Q1 **OKRs** through weekly/bi-weekly check-ins blending **Agile** iterations with **Waterfall** funding milestones.
- Delivered an investor-ready platform (**React, TypeScript, Go**) by running **sprint planning, backlog grooming**, and code reviews, **cutting onboarding from 3+ months to a couple weeks** and enabling new investor deals.

NEAR Protocol, Toronto

Director of Technical Product & Growth

Toronto, ON

May 2024 – Sept. 2024

- Took "Seahorse," a privacy-first distributed mental health platform, from concept to MVP via requirements, roadmap, and sprints (**React, Next.js, Python, on-device RAG, WebLLM, NEAR contracts**), **securing \$750K in funding** after 2 live hackathon demos.
- Grew the NEAR Toronto ecosystem via event sponsorships and technical activations, **increasing local developer engagement by 600 DAU**.

Webisoft

Software Engineer

Montreal, QC

July 2024 – Oct. 2024

- Migrated 1k+ Excel RFQ tables** to a web app (**React & Express.js**), cutting processing time for hundreds of staff **managing \$100M+ RFQs**.

Shopify

Software Engineer – Unified App Deployments

Toronto, ON

Jan. 2023 – Apr. 2023

- Extended extension-hosting infrastructure with new **GraphQL** endpoints and **REST** migrations in **Rails**, used by **2,000+ developers daily**.
- Built React/TypeScript sections of the Partner Dashboard for extension configuration and management.

Software Engineer – Unified App Deployments

May 2022 – Aug. 2022

- Built extension-hosting features, adding **OAuth** fixes and features to the open-source Shopify CLI (**TypeScript**), used by **850 apps daily**.
- Migrated the Partner Dashboard frontend from **Rails** to **TypeScript and React** with the new design system, improving UX for **1.1M+ DAU**.

Magnet Forensics

Software Engineer – Systems, Tools, and Software

Waterloo, ON

Sept. 2021 – Dec. 2021

- Ran Jenkins CI pipelines and internal tools for 100+ engineers across multiple departments.
- Added React, Redux, C#, ASP.NET, and SignalR features to an internal Build Dashboard for build-status and system-health visibility.

Technical Skills

Languages: JavaScript, TypeScript, C, C#, Python, Java, Kotlin, Swift, C++, Ruby, CSS, HTML, R, TeX

Frameworks: Next.js, React, React Native, Mappedin JS SDK, MapLibre, WebGL, ARKit, Vite, Electron, Redux, Mantine, Chart.js, D3.js, ASP.NET, Express.js, Django, Fastify, Ruby on Rails, PyTorch, TensorFlow, Numpy, Seaborn, Matplotlib, scikit-learn

Tools: Git, Cloudflare, Jenkins, Maven, Gradle, Docker, Notion, Jira, Figma, Android Studio, GCP, TravisCI, PostHog, Snowflake, Apache Superset

Indoor Positioning: Sensor Fusion (EKF, PDR), VIO, VPS, BLE Beacons, IndoorAtlas, Velavu, Unknot.it, Punch Rescue

AI-Assisted Development: Cursor, OpenCode, Warp; spec-driven development (OpenSpec, ADRs); agentic workflows with task-matched models

Game Development: LibGDX, LWJGL, OpenGL, Pygame, Box2D, Ashley/Artemis ECS, Unreal Engine 4 & 5, Unity, Three.js

Databases, Cloud, and Infra: AWS (EC2, S3, Lightsail), Azure (DevOps, AI & ML Services), Firebase (Functions, Firestore, Auth, Hosting, Storage), MongoDB, SQLite, MySQL, MariaDB, Redis, LangCache