

SHAJINDER SINGH PADDA

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Senior Systems Architect and Full Stack Developer with 20+ years of experience specializing in architecting and scaling high-volume, security and privacy focused web applications.

EDUCATION

Algoma University

2010 – 2012

Degree BA Computer Science

Humber Institute Of

Technology

2005 – 2007

Diploma Computer

Programming

SKILLS

Languages

Ruby | JavaScript | TypeScript | PHP
| Python | Java

Databases

Postgres | Redis | MySQL |
MongoDB | Sqlite

Frameworks

Ruby on Rails | ExpressJS | Vue |
React | Electron | Nuxt

DevOps

Docker | Kubernetes | Linux/Unix
Systems Administration | CI/CD
Scripting (Bash, Fish, Jenkins) |
AWS, Google Cloud, Digital Ocean

WORK EXPERIENCE

Telus Health (Virtual Care)

Sr. Developer Analyst

2022 – 2026

- Architected and implemented highly scalable product modules within a Ruby/Postgres backend monolith.
- Migrated legacy REST API to GraphQL for the support administration portal.
- Optimized low-performing search queries (Postgres, Redis, Opensearch, Sequel ORM) to significantly reduce query memory load and execution time.
- Scaled back-end operations to handle direct, high-volume data integration with partner vendors. (Ruby, Sidekiq, Redis)
- Worked within a team to upgrade our eligibility handling microservices, scaling from handling 5,000 transactions in minutes to a concurrent batch processing system capable of handling 1M+. (NodeJS, TypeScript, Redis, Bulma)
- Designed and implemented a high volume caching system and data sync with sister systems used in authentication. (Ruby, Postgres, Solace).
- Worked directly with our support teams to help migrate legacy clients to new optimized flows, writing custom utility scripts and data handling procedures in production. (Ruby, Jenkins)
- Implemented backend authentication logic for vendor side integration to internal systems (JWT, Ruby)
- Ensured systems architecture and data integration pipelines maintained strict compliance with Canadian PIPEDA/PHIPA privacy regulations regarding electronic health records.
- Performed and participated in peer code reviews (Ruby, React, TypeScript, Postgres)

Mobile Fringe

Sr. Web & Mobile Developer & Architect

2015 – 2022

- Led migration of a legacy proprietary CMS from Rails 3 to a Rails 5 API backend, implementing a secure REST API and a modern VueJS/HTML5 front end.
- Oversaw maintenance of internal billing software for a top 3 Canadian telecommunications provider (Rails, MySQL, REST API, VueJS).
- Developed, maintained and deployed shopping centre directory board mapping apps to various malls across North America. (ElectronJS, C#)
- Implemented and wrote an efficient wayfinding algorithm (based on Dijkstra's wayfinding), with customized use for navigation within shopping centres. (JavaScript)
- Implemented Kubernetes cloud cluster and provisioned servers for scalable app deployment and maintenance.
- Used AWS cloud solutions to maintain backup and deployment scripts for various projects. (EC2, S3 and RDS)

- Maintained and deployed Android and IOS apps. (Java, Android, Objective C)
- Communicated directly with stakeholders and assisted the project management team with SOW agreements.

Pause Productions

Sr. Web & Mobile Developer

2007 – 2015

- Architected and maintained proprietary ERP systems that managed inventory, order processing, fulfilment and product pricing.
- Developed and maintained e-commerce software solutions that integrated with Amazon, eBay, Canada Post, UPS, FedEx, Moneris, Paypal and NetBanx.
- Created middleware to interact with REST APIs, ASN EDIs, SOAP, JSON and text-based file formats.
- Automated continuous integration/deployment (CI/CD) processes using scripts on internal Git and Subversion repositories.
- Ensured system stability and security by conducting audits, applying 0-day security patches, and performing post-mortem analyses.
- Designed, developed and deployed proprietary cloud backup solution.
- Designed and developed internal time tracking Jira Plugin.
- Assisted in the development of Rest SDKs for a third party payment gateway.
- Maintained and assisted in developing internal CMS solutions.
- Developed middleware plugins to interact between public CMS and internal intranet systems including interaction with legacy databases.
- Managed and led development on several mobile games that launched on both the Android and iOS platforms.
- Consulted clients and product managers to provide support in order to accurately scope and quote the level of effort required for new and existing projects.

Independent Contractor

Early Career & Consulting

2001 – 2022

- Assisted early startups with POC and MVP development in Rails and deployed to AWS.
- Architected internal system processes and document management solutions for professional small business clients.
- Setup and management of secure VPN and LAN servers and services within various professional offices.
- Created media, promotional and e-commerce websites using WordPress and Shopify platforms.
- Worked on hardware and network procurement, maintenance and deployment for small businesses.
- Performed data migrations, recovery and system restorations.