SHAJINDER SINGH PADDA

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Senior Systems Architect and Full Stack Developer with 20+ years of experience in architecting and scaling - high-volume, security and privacy-focused web applications. AI-ready and deeply experienced in leveraging AI tools to improve development speed, code quality, and system automation.

SKILLS

AI & Tooling
LLM API Integration (OpenAI, Anthropic, Gemini) | AI-Assisted Development (Cursor, Kilo) | Custom Agent Scripting

Languages
Ruby | JavaScript | TypeScript | PHP

Databases
Postgres | Redis | MySQL | MongoDB | Sqlite

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

Messaging & Integration
Solace | BullMQ / Sidekiq | REST & GraphQL | Event-Driven Architecture

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

EDUCATION

Algoma University
2010 – 2012
Bachelor of Arts in Computer Science

Humber Institute Of Technology
2005 – 2007
Diploma Computer Programming

WORK EXPERIENCE

Telus Health - Virtual Care (Remote)
Sr. Full Stack Developer *2022 – 2026*

Stack: Ruby on Rails, Node.js, TypeScript, PostgreSQL, GraphQL, Redis, BullMQ, Solace, Jenkins, Datadog, React

- Architected and implemented **core products and services module** controlling user access, sustaining **thousands of requests per minute** within a Ruby monolith with negligible latency and memory load. (Ruby, Postgres).
- Migrated **REST API to GraphQL** for the support administration portal, eliminating REST over-fetching and **decreasing load latency by 70% (from 2s to 600ms)**.
- Optimized low-performing search queries (Postgres, Redis, Opensearch, Sequel ORM), **slashing execution time from up to 8 seconds down to 500ms**.
- Scaled back-end operations for **high-volume vendor data integrations** supporting **thousands of users** (Ruby, Sidekiq, Redis).
- Upgraded eligibility microservices, **scaling concurrent batch processing from 5K to 1M+ transactions** (NodeJS, TypeScript, Redis, BullMQ).
- Architected a high-volume **Event-Driven data synchronization pipeline** using Solace and Ruby, enabling real-time authentication consistency across systems.
- Worked with support to migrate legacy clients to new optimized flows, writing utility scripts and triaging issues in production. (Ruby, Jenkins, Datadog).
- Implemented JWT vendor authentication for integrations with **Canada's top insurance and benefit providers** (Ruby).
- Integrated AI tools and agent scripts into the development pipeline to assist with routine tasks and **improve workflow efficiency**.
- Ensured systems architecture and data integration pipelines maintained **strict compliance with Canadian PIPEDA/PHIPA privacy regulations**.
- Mentored junior developers via pair programming and enforced code quality through PR reviews within a **core team of 6 and across 4 engineering teams** (Ruby, React, TypeScript, Postgres).

Mobile Fringe / Mall Maverick (Hybrid)
Sr. Web & Mobile Developer & Architect *2015 – 2022*

Stack: Ruby on Rails, Vue.js, Electron, C#, Kubernetes, AWS (EC2, S3, RDS), Java, Objective-C

- Led migration of a legacy proprietary CMS handling **thousands of North American malls** from Rails 3 to a Rails 5 API backend, **accelerating feature development** and resolving legacy security vulnerabilities.

- Scaled mission-critical internal billing software for a **Top-3 Canadian telecom provider**, processing **millions of dollars in B2B transaction records** with high availability.
- Developed, maintained and deployed shopping centre directory board mapping apps to various malls across North America. (ElectronJS, C#).
- Engineered a custom **Dijkstra-based wayfinding algorithm** for directory boards, delivering real-time, **highly accurate routing deployed across 50+ shopping centres and over 1,000 active kiosks**.
- 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*

Stack: PHP, Java, REST/SOAP APIs, Git, Subversion, Jira, Android, iOS

- Architected proprietary ERP systems and e-commerce solutions integrated with major marketplaces (Amazon, eBay), couriers, and payment gateways.
- Developed custom middleware, REST SDKs, and CMS plugins to bridge public platforms, legacy databases, and EDI/SOAP/JSON APIs.
- Managed system stability by automating CI/CD pipelines, deploying cloud backup solutions, and conducting security patch audits.
- Led mobile game development for iOS/Android, built custom Jira plugins, and consulted stakeholders on project scoping.

Independent Contractor & Open Source

Consulting & Open Source Projects

Stack: QML, LLM APIs (OpenAI, Anthropic, Gemini), Ollama, Ruby on Rails, Hugo/Jekyll, CI/CD, AWS

- Architected and maintain Sathi.ai, an open-source Linux desktop AI client featuring a unified API abstraction layer to interface seamlessly with both cloud (OpenAI, Anthropic, Gemini) and local (Ollama) LLMs.
- Developed high-performance static sites (Hugo, Jekyll) with automated CI/CD deployment pipelines for professional clients, including legal firms, clinicians, and political campaigns.
- Engineered MVPs for early-stage startups in Rails and built custom e-commerce solutions using WordPress and Shopify.
- Designed secure internal networks (VPN/LAN), document management systems, and managed hardware procurement.
- Executed mission-critical data migrations, server setups, and system recovery for small business clients.