



Rajat Mangal

SKILLS

Java, Node.js, JavaScript, Python, React, AWS Lambda, DynamoDB, SQS, API Gateway, CloudWatch, CloudFormation, SQL, MongoDB, Docker, Grafana, Sentry, Railway, CloudFront

RECENT PROJECTS

Bursar Mobile App

Developed a personal finance management mobile app that allows users to link bank accounts or submit statements, track budgets, debts, subscriptions, and financial goals, providing a clear overview of personal finances and actionable insights with 100% user data protection.

Hearth Mobile App

Developing Hearth, a cross-platform home maintenance app built with React Native, Expo, Supabase, and Node.js, featuring AI-powered home insights, appliance lifecycle tracking, contractor management, and risk-based home health monitoring. Inspired by personal and community homeownership challenges.

EDUCATION

B.Sc in Computing Science
Simon Fraser University
Burnaby, BC, CA
JAN 2017 - DEC 2021

ACHIEVEMENTS

Impact Player of the Org
(Absolute Software)
2022

Dean's Honors Roll (SFU)
2021

1st Place – Junior Hackathon (SFU)
2018

EXPERIENCE

Software Development Engineer | AWS

Sep 2022 - August 2026, VANCOUVER, CANADA

- Designed and launched a critical business intelligence reporting service spanning **35+ AWS regions**, automating end-to-end daily data collection and reducing **manual operational effort by ~90%**. Built validation and backfill mechanisms to **ensure 99.9%+ reporting completeness** with zero production incidents enabling PMs and leadership to derive insights in minutes instead of days.
- Owned and led the v2 migration of a **high-traffic backend service (400K+ daily requests)** across **35+ regions**, acting as the subject matter expert and primary point of contact, **ensuring zero customer** impact via phased rollout, fallback strategies, and real-time monitoring.
- Built a team-wide automated investigation and impact detection system, aggregating anomalies, logs, and CloudWatch insights into a unified workflow, **reducing regular on-call investigation time by ~50%** and by **~95% during large-scale events (LSEs)**.
- Built an automated recovery system for degraded EKS clusters, **eliminating manual support by ~99%** and implementing **self-healing workflows** to automatically remediate dangling cluster states across all over production.
- Built and launched EKS infrastructure for a new private region **across 14 services**, collaborating with **44+ teams** in a high-ambiguity environment.

Junior Software Developer | Absolute Software (Co-op → Full-time)

Sep 2020 - Sep 2022, VANCOUVER, CANADA

- Led migration of a revenue-critical Chrome extension from Manifest V2 to V3, **rewriting ~60% of the codebase** and engineering alternative solutions for deprecated browser APIs to restore core functionality, including device tracking and remote lock/unlock capabilities.
- Built a streamlined customer migration system to transition users to a new web platform, **increasing adoption from 43.5% in 6 months to 86.3% in 6 weeks**, driving a **12.8% increase in sales** and enabling deprecation of legacy infrastructure.
- Developed real-time dashboards to monitor device activity and detect suspicious behavior, **improving security visibility** for enterprise customers.

Software Developer Intern | Webb Electronics

May 2020 - Aug 2020, BURNABY, CANADA

- Redesigned the legacy client-facing web UI for a building entry system, **improving usability and accessibility**.
- Built an admin portal enabling clients to manage system configurations independently, **reducing support workload by ~55%** and reducing manual intervention from engineering.