Raman Bhandari

✉ bhandar1@myumanitoba.ca
🖷 ramanbhandari.github.io
⌂ @ramanb in/ramanb

Work Experience

G3 Canada | Developer I
08/2024 - present
Winnipeg, Manitoba
- Resolved a race condition causing 8% login failures, reducing errors to 1.2% by fixing session timeout handling. Diagnosed and deployed the solution using logs, Dynatrace, and Azure.
- Reduced service worker errors on iOS Safari from 19% to <2% by replacing a faulty offline-plugin with a no-op service worker and optimizing caching with NGINX, ensuring reliable app updates.

Priceline | Software Developer Intern
01/2024 – 03/2024
Winnipeg, Manitoba
- Improved pricing transparency for millions of users by leading API compliance updates to meet U.S. regulations, ensuring final prices were displayed upfront for B2B partners.
- Reduced log storage by 90% and extended visibility to 30+ days by migrating from Splunk to New Relic with PHP Agent and Terraform, reducing operational overhead.

G3 Canada | Software Developer Intern
01/2023 - 12/2023
Winnipeg, Manitoba
- Cut manual testing time by 30% and improved regression test accuracy by automating QA with Selenium and Jest, streamlining the QA process.
- Contributed to SMS notification feature by handling backend integration with ServiceNow and frontend with JavaScript, React and Redux, leveraging TeleSign.

Priceline | Software Developer Intern
05/2022 - 08/2022
Winnipeg, Manitoba
- Boosted server response time by 86% for a high-traffic API endpoint by refactoring API architecture, reducing latency and enhancing performance.
- Optimized 4+ API endpoints with PHP 7.4+, PHPUnit, and Postman, improving stability by 20% and ensuring smooth version transitions.
- Ensured compliance with Level 8 security standards by resolving <90% critical codeQL vulnerabilities, strengthening overall system security.

Projects

Distributed Blockchain Peer & Miner | *Python, Rust, CUDA, C++, Event-Driven OOP* 🔗
10/2024-present
- Developed a Python-based blockchain peer capable of synchronization, consensus, and state management, utilizing event-driven object-oriented programming for efficient network communication & protocol handling.
- Implemented two mining clients: a Rust-based CPU miner & a C++/CUDA-based GPU miner, establishing custom TCP/IP protocols for seamless interaction with the blockchain peer, enhancing overall performance.

Rusty Sound Flow | *Rust, CPAL, RustFFT, WGPU* 🔗
10/2024 - 11/2024
- Developed a real-time audio visualization tool with support for both live microphone input and audio files.
- Implemented optimized GPU-accelerated rendering for smooth real-time waveforms and frequency spectrums.

Leadership

.DevClub 🔗 | President
05/2023 - 04/2024
- Led a team of 12+ members, organizing hackathons and events for 2000+ students, including the largest hackathon in Manitoba with 350+ participants and 9 sponsors.

Skills

Languages | Java, Python, C, C++, Ruby, PHP, JavaScript, Rust, SQL, HTML/CSS
Technologies | React, Ruby on Rails, Expo, React Native, Apollo GraphQL, Node.js, Express.js, Flask
Tools | Git, PostgreSQL, Azure, Google Cloud (GCP), MongoDB, Terraform, Dynatrace, Kubernetes, Docker, Postman

Education

University of Manitoba | Bachelor of Computer Science (Co-op), Minor Mathematics
Expected April 2025
Undergraduate Student Research Award '21 ($7,000), International Student Scholarship '21, Dean's Honour Roll '21
Involvement: .DevClub, Computer Science Students Association, UM Student Union, CUSEC