Rajan Sapkota

UBC Science Co-op

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TECHNICAL SKILLS

Languages & Databases: C++, C, Python, Java, JavaScript, TypeScript, HTML/CSS, Assembly, SQL

Frameworks & Libraries: Node.js, Firebase, Flask, Django, React, Stripe, Pytorch

Tools & Platforms: AWS, GCP, Docker, Git/GitHub, GitHub Actions, TeamCity, Datadog, Selenium

TECHNICAL EXPERIENCE

Software Developer Intern — Thrive Health

Sept 2024 - Present

Vancouver, Canada

- Optimized API performance by reducing API call latency by 400%, leveraging a selective filter mechanism integrated into the React hook, enhancing data-fetching efficiency
- Strengthened application security by implementing role-based access control through structured Access
 Control Lists, assigning precise CRUD permissions tied to relational SQL database entities
- Utilized Agile methodologies, including sprint planning and retrospectives, for iterative development; conducted comprehensive Datadog dashboard reviews to identify software errors and generated actionable tasks for resolution

Software Developer — L.E.A.P AI

Jan 2024 - May 2024

Vancouver, Canada

- Addressed the needs of 5,000+ students by engineering an AI academic advising chatbot using the PaLM 2 model to answer course-related queries
- Saved administrators 100+ hours by implementing an admin page with React, Firebase and MongoDB that
 allows administrators to review and validate feedback provided by the AI
- Boosted AI response accuracy by 40% through the strategic scraping of Sauder's course information using
 Selenium, transforming it into structured documents, and employing Voyager 2 for enhanced embedding

TECHNICAL PROJECTS

Medical SaaS Platform — www.kaducare.com

July 2024 - Present

KaduCare

- Achieved a 90% reduction in consultation times by integrating transcription tools, LLMs, and a user-centric design using React and Tailwind CSS for seamless doctor note generation
- Delivered a production-ready SaaS product with Cloud Functions, Stripe for payment processing, Firebase for real-time data management, and CI/CD pipelines for automated deployments
- Ensured HIPAA compliance and privacy by adopting a **zero data retention policy**, establishing **BAAs** with all third-party vendors, and building scalable, secure architecture

Ticket Scraping and Notifying App — www.notifynd.app

Jan 2024 - April 2024

Notifynd

- Cut ticket searching process time by 95% by developing a ticket scraping Chrome Extension using Python and Playwright which alerts users when concert tickets match their price range
- Reduced monthly operational costs by 80% by redesigning the system architecture to include a SQL-based watchlist for dynamic task allocation, minimizing SQL database calls and preventing database overload
- Achieved full automation of ticket scraping, capable of concurrently scraping 100 sites every 30 minutes using Docker, AWS EC2, and Mailchimp, ensuring efficient and timely notifications on ticket availability

EDUCATION & ACHIEVEMENT

University of British Columbia

Vancouver, BC

Bachelors of Computer Science and Business

Sept 2021 - May 2026

- Awards: International Entrance Scholarship and Outstanding International Student Award (\$100,000)
- Key Courses: Data Structures and Algorithms, Software Construction, Relational Databases, Financial Modeling