Brian Erlangga

✉ berlangg@uwaterloo.ca | 📞 647-819-9989 | **in** brianerlangga | ⬡ BrianErlangga | 🔗 brianerlangga.com

Education

University of Waterloo, B.A.Sc. in Computer Engineering   Sept 2020 – Current

Relevant Courses: Software Design and Architectures, Machine Learning, Computer Networks, Compilers, Algorithms and Data Structures, Systems Programming and Concurrency, Real-time Operating Systems

Honors: University of Waterloo President's Scholarship, Faculty of Engineering Entrance Scholarship

Work Experience

Purolator | Front End Developer Co-op   Waterloo | Sept. 2025 – Dec. 2025
- **Accomplished a significant reduction in bot activity and stabilized API call thresholds** by integrating the AWS reCAPTCHA SDK and collaborating with DevOps to resolve domain-specific 403 error conflicts.
- **Delivered the first end-to-end site revamps in over two years** for the Marketing Communications team by implementing comprehensive UI designs and engineering a dynamic FAQ component with JavaScript.

Sun Life | Associate Front-End Developer   Toronto | Jan 2025 – April 2025
- **Evaluated the viability of Google Lit Web Components** within a React codebase by conducting a technical Proof of Concept using lit-labs/react.
- **Increased performance awareness for 100+ developers** by delivering a technical presentation on Google Lighthouse and building an Excel dashboard to monitor performance regressions.

Viral Nation | Software Developer   Toronto | Jan 2023 – April 2023
- **Integrated over 50 AI content creation tools** via REST APIs for a responsive TechLabs platform and maintained stability across three web projects during fast-paced sprints.

OANDA | React Native Software Developer   Toronto | Sept 2021 – Aug 2022
- **Developed an assets holding list for forex and crypto services** using React Native, TypeScript, and Apollo GraphQL currently used by global customers.
- **Optimized front-end data propagation** by building custom Apollo GraphQL queries and ensured high reliability through JEST test coverage across three trading platforms.

OpenText | Software Developer   Waterloo | Jan 2021 – April 2021
- **Engineered a search query for the OpenText CSS library** and implemented a dynamic folder widget using Angular and Sass, both adopted for internal use.

Projects

Reciplan | AI-Driven Recipe Extraction Platform   Front-end | Back-end
- **Architected a multi-layered Android application** utilizing a Pipe-and-Filter processing pipeline to transform TikTok video URLs into structured recipe data.
- **Engineered a 6-stage extraction pipeline** by integrating OpenAI Whisper, GPT-4, and PaddleOCR to achieve high-accuracy data structuring from raw multimedia inputs.
- **Developed a responsive UI with Kotlin and ViewModels** while optimizing an "Offline-first" architecture using Room DB to deliver search results in under 500ms.

Music Submission Platform | Next.js Developer   github.com/automated-dev/saucefamilia
- Developed a web platform using Next.js and Google Cloud for music producers to manage accounts and automate music file submissions via Stripe API.

Skills

Languages: C++, JavaScript, TypeScript, CSS, HTML, Java, Python, Swift, Kotlin
Frameworks/Tools: React, React Native, Angular, Node.js, Next.js, Apollo GraphQL, Git, JEST, Sass
Platforms/Databases: AWS, Google Cloud, Firebase, Supabase, MongoDB, PostgreSQL, Room DB