

Arun Atchuthanathan

Toronto, ON | 647-929-3426 | aatchuth@uwaterloo.ca | arunatchu.tech | linkedin.com/in/arun-atchu/

EDUCATION

University of Waterloo

Bachelor of Computer Science | Artificial Intelligence Specialization

Waterloo, ON

Expected April 2026

- **94.79%** Cumulative GPA - Academic Distinction
- Courses: Data Structures & Data Mgmt, Intro Machine Learning, Operating Systems, Logic & Computation, Algorithms

TECHNICAL SKILLS

Languages: Python, C, C++, Java, Kotlin, Swift, Javascript, Typescript, HTML/CSS, C#, Lua, Scala, Git, SQL, R

Tools: React, NodeJS, Flask, PyTorch, REST API, PostgreSQL, Firebase, Snowflake, DynamoDB, Docker, Linux

WORK EXPERIENCE

Engineering Intern, X (Twitter)

January 2025 - Present

- Enhancing **Timeline** features on **Android** by leveraging modern **Kotlin** tools and expanding **backend** assets

Software Engineering Intern, RouteThis

May - August 2024

- Conducted mobile upgrades on the Certify app for network technician users; Led **Android** user-flow redesign
- Implemented framework changes to stabilize wifi measurements with **98%** accuracy and detect roaming events
- Initiated network data collection and formatting for optimized storage in **AWS DynamoDB** and **S3** databases
- Facilitated development for **Kotlin** path tracing prototype with sensor fusion to mitigate sensor inaccuracies
- Validated **iOS** and **Android** releases; Monitored user adoption in gradual rollouts using **PostHog** feature flags

Android Developer, Innovapost

September - December 2023

- Implemented new QR code and accessibility features for Canada Post Android application with **over 1 million** downloads
- Analyzed and facilitated **Kotlin** code migration to use **KSP** processing tool - reducing development build times by **50%**
- Upgraded mobile layout and navigation flow, noted by improved user reviews and ratings on the Google Play Store
- Spearheaded systems in the **Agile** workflow to refine code standards and to reduce excessive, costly resource licenses

Software Developer, Infor

January - April 2023

- Created a new **Kotlin** logging system to monitor and interpret internal service data in the Workforce Management app
- Optimized codebase by refactoring data logging and upgrading **Java** features to **Kotlin**, reducing execution times by **70%**
- Developed **Spring Boot** aspect-oriented blacklist privacy system to filter logged services and exclude sensitive data
- Constructed **JUnit** tests to validate proof-of-concept functionality based on data extracted from **PostgreSQL** databases

Software Quality Assurance Engineer, AlertDriving

May - August 2022

- Collaborated with both Development & QA teams to enable **TDD** for new **Javascript** features in user-facing web app
- Validated backend optimizations to improve processing speeds by **30%** for batch updates of **10000+** concurrent users
- Utilized **SQL** databases and **PHP** to efficiently generate, validate, and deliver over **30000** client reminder emails
- Analyzed **GitFlow** and **Agile** SDLCs in 20 page report detailing the company's development maintainability and efficacy

PROJECT EXPERIENCE

Rate-It | Sentiment Analysis Interface | *Python, Flask, Javascript, HTML/CSS*

February 2024

- Programmed **Python** and **Flask** backend to categorize text sentiment through a **Javascript** web app hosted on **Streamlit**
- Integrated Python **libraries** to analyze emotions and score further parameters including message **polarity** and **subjectivity**
- Leveraged file text processing to augment **input choices** with **text** and **csv** files; Integrating social media posts via **links**

Lyrify | Spotify Web App | *Javascript, React, HTML/CSS, Bootstrap*

August 2023

- Developed music lyric generation and search on **Spotify API** playback with **Javascript** and **React** before adopted natively
- Implemented user-friendly **authentication** to connect to existing client social accounts and allow customization of web UI
-

RAINet+ | Multiplayer Strategy Game | *C++*

December 2022

- Built and documented **C++** game with visual and text displays for live, interactive **single-screen multiplayer** gameplay
- Implemented **object-oriented** design to facilitate mechanical modifications, player **customization**, and game modes
- Shortened input and **render time** by over **50%** by **decoupling** through **MVC** design and **optimizing** game state updates