

Arun Atchuthananathan

Toronto, ON | 647-929-3426 | aatchuth@uwaterloo.ca | aruna6.github.io/arun-a | linkedin.com/in/arun-atchu/

EDUCATION

University of Waterloo

Bachelor of Computer Science | Artificial Intelligence Specialization

Waterloo, ON

September 2021 - May 2026 (Expected)

- **95.05%** Cumulative GPA - Academic Distinction
- Coursework: Machine Learning in Economics; Object-Oriented Software Development; Data Structures & Algorithms

TECHNICAL SKILLS

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

Tools: React, Angular, Node, Bootstrap, Flask, PyTorch, Firebase, Postgres, Docker, Unity, Jira, Confluence

WORK EXPERIENCE

Android Developer

Innovapost

Toronto, ON

September - December 2023

- Implemented new QR code accessibility features, released for Canada Post Android app with **over 1 million** downloads
- Analyzed and assisted **Kotlin** code migration to use **KSP** processing tool and reduced development build times by **50%**
- Developed analysis tool using **Kotlin** and **Adobe** to provide email summaries of development changes to management
- Adapted mobile arrangement and page navigation bar, leading to noted improved user experience **ratings** and **reviews**
- Spearheaded initiatives in **Agile** workflow to refine code standards and resource usage across application code repository

Software Developer

Infor

Remote

January - April 2023

- Created a new **Kotlin** logging system to monitor and interpret service data in the Workforce Management application
- Spearheaded efforts to **refactor** past data logging features and upgrade **Java** services, reducing execution times by **70%**
- Developed **Spring 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

Toronto, ON

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*

January 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 add **input choices**, such as **text** and **csv** files, with ongoing testing for social media **links**

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

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

RAIINet+ | 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

BookMark | Socialized Book Catalogue | *Firebase, Javascript, HTML/CSS*

December 2020

- Designed a social online book catalogue of the school library for students to message about, search for, and rate books
- Utilized **Firebase** to **link** user ratings, messages, and preferences with either a **custom login** or their **Google account**
- Restructured backend book entries to enable daily book recommendations, flexible book searches, and personalized filters