Andrew Arochukwu

acarochu@uwaterloo.ca | https://github.com/aarochuk | website

Education

University of Waterloo — Waterloo, ON
Bachelor of Honours Computational Mathematics and Statistics — *Sep. 2021 – May 2026*
Relevant Coursework: *Data Types and Structures, Object Oriented Programming, Networks and Distributed ComputerSystems*

Technical Skills

Languages: Go, Python, C, C++, SQL (Postgres), JavaScript, HTML/CSS, R
Frameworks: React, Node.js, Flask, React Native, Django, ExpressJS

Experience

Embedded Software Developer Intern — September 2024 – December 2024
Ciena — *Ottawa, ON*
- Implemented persistence of TACACS+ provisioning after cold and warm shelf reboot.
- Developed ability to provision TACACS+ servers and service on web via Swagger.
- Implemented new logging API for shelfs, that include complete tracing for error and warning messages.

Frontend Developer — September 2024 – December 2024
Antennai — *Waterloo, ON*
- Designed and implemented landing page for startup, including fully functional contact form.
- Developed python scripts to scrape freely available podcast data for use in training annotation model.

Software Developer — May 2024 – August 2024
Develop for Good — *San Francisco, CA*
- Designed responsive organization page, providing users a centralized view to join or leave organizations.
- Extended the home page by adding quick appointment scheduling functionality and a calendar to view and reschedule all upcoming appointments.
- Implemented new organization data API using GraphQL, leading to improvements in organization data retrieval.

Embedded Software Developer Intern — January 2024 – April 2024
Ciena — *Ottawa, ON*
- Developed automated testing framework for network shelves which reduced OSPF and ISIS regression testing time from **6 hours to 10 minutes**.
- Increased data collection from network shelf by developing CPU and memory parsers which parsed shelf data into JSON, also leading to increased testing coverage by 42%.
- Reduced simulator network configuration time from **10 minutes to less than 30 seconds**, by developing configuration framework that use JSON files to launch shelf simulators and create networks.
- Designed novel provisioning framework that eliminated the need for provision files, reducing network shelf provisioning time by 3 times.

Software Developer Intern — January 2023 – August 2023
Ericsson — *Ottawa, ON*
- Created new web application using React and node.js for automatic report generation of testing and software status for testers and team leads, increasing access to testing reports to team leads and testers.
- Implemented an application to automate the creation of Grafana Dashboards, used to display test channel activity, reducing mistakes is dashboard configuration and reducing time taken to make dashboards.
- Deployed Postgres test databases to replace excel sheets containing test data; reducing query time by 97%.

Projects

tuneshift | *Flask, React, BeautifulSoup, MongoDB* — August 2024
- Created a web app where users can create a Spotify playlist by either entering the link to an Apple Playlist, or a billboard hot 100 date. In both cases the data (from the apple playlist website, or billboard hot 100 website), is scrapped and used to find the songs which are added to the Spotify playlist.

HippoStock | *HTML, CSS, Javascript, Bootstrap, PostgreSQL* — September 2023
- Developed website for users to learn about stock trading by trading fake stocks with fake money. Users are able to buy stocks, sell stocks, see their current holding and the trade history. In addition, users are able to make friends and see their friends current holdings and trade history.