Patrick Maloney

linkedin.com/in/patrickbmaloney github.com/patrickbmaloney

SKILLS

Languages: JavaScript/TypeScript, Java, Python, HTML, Sass, C++, C#, C, SQL

Frameworks/Tools: React, Redux, Node.js, Spring Boot, React Native, Android Studio, PostgreSQL, MongoDB

PROFESSIONAL EXPERIENCE

Software Development Engineer | Amazon

Vancouver, BC | May – Aug 2022

- Designed and implemented a user-friendly dashboard for corporate Amazon Gift Card clients, enabling them to independently view transaction volumes and troubleshoot failed API requests without contacting customer support
- Developed a robust React application, Spring Boot APIs, and AWS Lambdas to efficiently query a PostgreSQL database, aggregate data, and present informative visualizations to clients

Software Engineering Intern | Lifion by ADP

New York, NY | Jan - April 2022

- Created a Chrome extension that profiles the performance of Lifion's React web pages and generates an interactive visualization for identifying bottlenecks in the page load, enabling performance improvements for users
- Utilized vanilla JavaScript, advanced CSS, and HTML to design and develop a highly interactive data visualization UI
- Led log reviews and initiated process improvements that significantly enhanced defect detection in production

Full Stack Developer | IBM

Ottawa, ON | May - Aug 2021

- Developed a web app used by 26,000+ IT specialists to manage their instances of QRadar, a Security Information and Event Management (SIEM) system, using **React, Redux, JS**, **Sass**, **Node.js**, **SQLite**, and **TingoDB**
- Created **React** components and APIs in **Node.js** to support the searching, filtering, and viewing of cybersecurity data
- Independently designed and implemented a new feature allowing clients to export a zip file with an interactive HTML report displaying visualizations of their SIEM data for offline viewing

Software Engineering Intern | Ford Motor Company

Ottawa, ON | Sept - Dec 2020

- As the person second-most experienced with the code base, I brought forward major design decisions and implemented critical new features while increasing code stability and maintainability
- · Completely redesigned the team's API to allow for request status callbacks and a more efficient requesting workflow
- Expanded unit test coverage by 25% using **gtest** and **gmock** frameworks in my first two weeks

Software Engineering Intern | Ford Motor Company

Ottawa, ON | Jan - Apr 2020

- Produced large-scale, thread-safe and performance-oriented software using C++ to manage data from Controller Area Networks (CAN) across three Electronic Control Units (ECUs)
- Used VS Code and Momentics to develop cross-platform code to run on Linux and QNX embedded systems
- Delivered debugging tool to enabled CAN messaging and resource state guerying and state reguests during testing

Software Developer | Big River Technologies Inc.

Gananoque, ON | May - Aug 2019

- Designed and built a MySQL database to improve tracking of employee provisioning and access management
- Used **React** and **CSS** to implement new features and defect fixes to support the development of a client web app
- Developed coding best practice and company standards documentation

RELEVANT PROJECTS

Watopoly | Available on the Google Play Store ▶

 Built a native Android (Java), feature complete, multiplayer UWaterloo-themed version of Monopoly using advanced software design patterns and architectural styles

PneomoSense | Fourth-Year Design Project

 Developed a **React Native** app, currently in use by doctors, that captures photos of lung ultrasounds and uses image processing and Al to detect Pneumothorax

EDUCATION

BASc. in Systems Design Engineering and Computing

Sept 2018 – April 2023

University of Waterloo, Graduated with distinction and on the Dean's Honours List

90% Avg, **3.85/4** GPA

Relevant Courses: Software Design and Architecture, Data Structures and Algorithms, Computer Networks, Programming for Performance and hundreds of hours of self-learning through online courses