Alexander Shen

Toronto, ON | 647-918-9419 | alexander.shen@gmail.com | linkedin.com/in/alexandershen2004 | github.com/AlexShen101 | alexshen.com.de

EDUCATION

University of Waterloo — Sep 2022 - Apr 2027
Bachelor of Computer Science (Co-op)
GPA: 3.78

Courses: Logic and Computation, Object-Oriented Software Development.

TECHNICAL SKILLS

Languages: JavaScript, Python, C++, Java, C, PHP, SQL, TypeScript, HTML/CSS, RegEx
Frameworks: React, Node.js, Bootstrap, jQuery, Symfony
Developer Tools/Libraries: MongoDB, Firebase, Amazon Web Services, Docker, Bash, Git, Vim

EXPERIENCE

Full Stack Developer — Jan 2024 - Present
Polaris Intelligence — *Toronto, Ontario*

- Used **Javascript and JQuery** to create visual indicators for the save status of geographic areas, improving the user experience and productivity of the mapping centre module.
- Optimized automated test script performance using **Python and Selenium**, improving performance by **80%** through the implementation of **parallel execution utilizing multithreading** in order to **improve test coverage and reduce manual testing efforts.**
- Developed and optimized a postal code to address web scraping script featuring **parallel execution, fuzzy searching, and address matching algorithms**, in order to **streamline postal code validation within business data** and **improve overall data quality.**
- Ensured a smooth migration from **PHP 7 to PHP 8** by resolving compatibility issues and updating Doctrine database queries

QA Analyst — May 2023 - Aug 2023
JANA Corporation — *Aurora, Ontario*

- Automated **40% of regression test cases** by creating **Selenium and Java** automation scripts, resulting in a **significant reduction in manual testing efforts.**
- Documented **over 100 bugs** using **JIRA, TestRail and the AGILE methodology**, **enhancing the software's reliability** and user experience.
- Addressed **authentication challenges regarding 2FA OAuth** by incorporating **cookie-caching methods**, **streamlining the automation workflow** to work with minimal manual intervention.

Full Stack Developer — Jun 2022 - Aug 2022
Ministry of Health — *Toronto, Ontario*

- **Automated processing of budget requests** by creating a frontend-to-backend data processing pipeline using **React, Express, Node.js, MongoDB, and REST API**, improving **data entry speed by 75%** for users.
- Learned about the **CI/CD Pipeline, OOP principles, monolithic repositories, and Azure DevOps** for project planning and version control while working with developers and business executives.

PROJECTS

GI Deck Builder Website | *JavaScript, MongoDB, Express, Node.js, React, Firebase*

- Built a web app that acts as a deck manager for users, allowing them to build new decks, download current decks and share it with others using the **MERN stack (MongoDB, Express, Node.js, React)** with a **React, Bootstrap and Redux** frontend for global state management and responsive UI.
- Used **Python and Beautiful Soup** to scrape **100+ card images** and data from websites and Google Sheets, which were stored using **MongoDB and Cloud Storage with Firebase**.

Notion-YouTube Music Player | *Python, Bash, AppleScript*

- Made a set of Python scripts that imitates a music player app utilizing the **YouTube Data API and Notion API**, using YouTube to play songs and Notion to store song data.
- Created a minimalist UI using Keyboard Maestro to map keyboard shortcuts to **Bash commands** and run relevant Python scripts.