

Amy Qin

2A Chemical Engineering

Contact Information:

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Highlight of Qualifications-----

- Skilled with NodeJS and Typescript in developing parsers to handle JSON, csv, tsv, xml in data-integration pipelines
- Knowledge of developing dynamic websites with React JS and NodeJS gained from personal project experience
- Proficient in developing test automation and continuous integration pipelines with NodeJS, Bash, and working with CI/CD tools such as Github Actions, Circle CI, Cypress and Percy in Linux Ubuntu, Darwin, and Windows
- Experienced in using Python libraries like Numpy, Pyplot for data processing, math visualization, and Pyfirmata for programming microcontrollers for data collection and processing.
- Competent in performing statistical analysis in Excel and problem solving using Solver and Macros
- Comfortable in taking ownership of projects and working without supervision when given a guideline through working in a research-based role by practicing discipline and accountability

Personal Projects-----

ChE Helper, <https://github.com/amy-mavis-qin/ChE-Helper>

- ChE Helper is an in-progress React.js app with dynamic components that perform unit conversions and calculations for chemical engineering concepts with focus on accessibility and simple design. The goal of this project is to build a dynamic website for chemical engineering students that acts as an information hub.

Professional Experience-----

Prodigy Education, Test Automation Engineer

Full time co-op | Sep. 2020 - Dec. 2020 | Toronto, ON

- Developed proof of concepts for CI automation, parallelism, and code coverage using NodeJS and Bash
- Researched and documented proof-of-concept pipeline automation with the use of virtual machines and parallelism in order to reduce runtime.
- Reduced workflow runtime by migrating continuous testing from Circle CI to github actions, where Docker images were used to run parallel automated tests as a part of an automated development pipeline
- Cut down runtime by 60x and doubled test efficiency as a result of using parallel Docker containers
- Integrated code coverage thresholds into the automated pipeline for the development environment
- The proof of concepts and documentations are being used as templates for upcoming CI pipeline migrations, increasing the efficiency of individual teams by reducing time spent on research and trial-and-error
- Worked independently on pipeline research and development projects and demonstrated accountability

Solink, Quality Assurance Specialist

Full time co-op | Jan. 2020 - May 2020 | Kanata, ON

- Worked as a QA specialist and parser developer for a POS data integration service used by major retailers, restaurants, and banking systems
- Developed parsers to map raw data structures retrieved from AWS as a part of a parser pipeline
- Used Node JS, Jest, and Yarn to process, monitor, and validate large data sets with automated test suites
- Handled backend data QA, applying attention to detail and organization to efficiently complete all tasks
- Automated the parser QA process, successfully reducing manual QA time from 6 hours to 2 minutes
- Maintained consistent communication with the team by providing daily progress reports at team meetings, ensuring the team stayed on the same page throughout the project and thereby preventing errors or project delays

Education-----

Candidate for Bachelor of Applied Science at University of Waterloo, Honours Chemical Engineering

Sept. 2019 - April 2024