Qingyuan Wu

Machine Intelligence Engineering Student, Third Year

Experiences

SENSEI LABS | Software Automation Engineer

May 2022 – Aug 2022, Full-Time

- Writing API and UI automation tests in **C#**
- Contributed to the automation test coverage by **4%**, adding over **60 automation tests** as of early August
- Worked on monitoring **Azure** pipelines and debugging why tests are failing during Continuous Integration
- Technologies used: **Microsoft SQL Server**, **C#**, **Selenium**, **Git**, **Docker**, **Azure**

GOOGLE SOFTWARE PRODUCT SPRINT | Software Engineer

June 2022 – Aug 2022, Part-Time

- Worked in a team of four student software engineers and a Google employee to develop and deploy a fully functional **Q & A forum app** called Rellit
- Presented the app to Google employees and other program participants

U OF T CLOUDCLUB | Backend Developer, AI Engineer

Jan 2022 – present, Part-Time

- Implemented the forum page's **pagination** feature
- Enhanced website security by implementing a **login verification feature**
- Working on a title generation **Natural Language Processing** project using a **transformer neural network**

U OF T ENGINEERING ACADEMY | Coding Instructor

May 2021 – Aug 2021, Full-Time

- Taught over **150 students Python** and **C** programming

Projects

PLASTIC SORTER | PyTorch

- Worked in a team of six Engineering students
- Trained a Convolutional Neural Network that received an image of a plastic and classified it by type
- The network sent its classification to an IOT system to place the plastic in the appropriate container

JOURNALLY - REMINDER TO JOURNAL | To be Implemented in MERN

- Worked as a **full stack developer**
- Sent registered users daily text reminders to write a short journal and stored responses in a **MySQL database**
- User responses were viewable on the Journally website
- The original idea won the **best use of Twilio award** in a U of T hackathon

SMARTLY CROPPING IMAGES | C

- Programmed an **image resizing tool** that performed seamcarving
- Removed one vertical "seam" of pixels at a time while **preserving important parts of the image**
- Used **dynamic programming** to compute the "minimal energy path" of pixels to be removed

Education

UNIVERSITY OF TORONTO

BASc in Engineering Science

Major: Machine Intelligence

Sept 2020 - May 2024

Technical Skills

LANGUAGES

Python • JavaScript • HTML
CSS • SQL • C • C#
MATLAB • Assembly

LIBRARIES/FRAMEWORKS

Node.js • Express.js • Git
Docker • PyTorch • NumPy

CONCEPTS

- Data Structures & Algorithms
- Containerization
- Agile
- Continuous Integration
- CRUD Operations
- MVC Design Pattern
- Object Oriented Programming
- Automation Testing
- Neural Networks

Coursework

- Data Structures & Algorithms (Python, C)
- Object Oriented Programming (Python)
- Machine Learning (PyTorch)
- Statistics
- Linear Algebra (MATLAB)
- ODEs
- Multivariable Calculus
- Digital & Computer Systems
- Engineering Design