

## Technical skills

Languages: C/C++, Java, Golang, Python, Ruby

Tools: Selenium, Pexpect, Git, Bash, SQL, Autodesk Eagle

# **Work Experience**

#### University of Waterloo - WEEF TA (Waterloo)

Aug 2019 - Dec 2019

- Leveraged Python scripts and Pexpect to automated grading of programming projects
- Designed state machines to accurately parse source files and student outputs
- Developed custom Android app in Kotlin to take attendance, enabling accurate attendance of 150 students in 15 minutes
- Received praise from students and professors on tutoring of difficult concepts in calculus,
  linear algebra, physics, and C++

#### **Axsium Group - Solution Developer** (Toronto)

Jan 2019 - April 2019

- Spearheaded development and maintenance of 3 automated test suites allowing for timely regression testing
- Significantly improved reliability of Ruby Cucumber code base, reducing false test failures from 900 to 150 in 3 months
- Improved robustness of Java Appium code base by increasing consistency of 13 test cases
- Assisted in the development of ASP .NET web applications by investigating bugs to free developer time

# **Projects**

### Personal Web App (work in progress, https://yihong.ca)

August 2019 - Present

- Developed and deployed SSL certified Golang web app to host personal projects and services
- Utilized MySql for storage of data required by applications
- Designed low memory frontend to reduce data transfer costs

### **University of Waterloo Formula Motorsports**

April 2019 - Present

- Redesigned power distribution unit of formula car, correcting previous faults
- Redrew circuit schematic and PCB layout in Autodesk Eagle
- Debugged and fixed electrical issues during testing of vehicle, allowing for timely collection of data

## Education

Candidate for bachelors of applied science - honours computer engineering, cooperative program, expected graduation 2023