# **Nigel Huang**

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# **Summary of Qualifications**

- Aspiring software engineer with 8 months of experience architecting and implementing high quality software in enterprise environments.
- Strong foundation in Object Oriented Programming, Data Structures and Algorithms, and Digital Logic.
- Active student in connecting and educating the tech community on campus. Tutor for programming and worked with others to host workshops attended by over 250+ students.

## **Relevant Experience**

# Quality Engineer Intern @ Royal Bank of Canada (RBC) May 2020 – Aug 2020

- Implemented a custom automation testing suite in JavaScript which reduced the time spent on manual QA regression testing by 83%.
- Decreased the turnaround time for production upgrade from 1 week down to 2 days through an initiative, including training sessions, to automate repetitive work.
- Collaborated with an Agile team through daily stand-ups, sprints, and requirement gathering with product owners and software developers.

### Software Developer Intern @ Loadlink Technologies May 2019 – Aug 2019

- Architected and implemented a REST API for integration between Salesforce and MS SQL which reduced customer wait times by 5 minutes.
- Developed and deployed Salesforce applications (JavaScript) to be used by 20 customer service representatives.
- Created an internal knowledge base website (Python, MkDocs) which aided in the maintenance of mission critical SSIS packages.

# **Projects**

### Ocurl https://ocurl.io

- Free REST API for getting and decoding shortened URLs. 10+ daily active users. Also available as Discord Bot and Chrome Extension.
- Built with Node.js, with Redis for caching, and Cassandra for storage. Utilized Docker Compose for containerized deployment.
- · Node.js, Apache Cassandra, Redis, Docker

#### **Obstacle Avoidance Robot**

- Robot that uses ultrasonic sensors to avoid obstacles and adjust it's own speed depending on environmental conditions.
- · C, Arduino, HC-SR04 Ultrasonic Sensor

### Mood Chatbot - UofT Hacks 2019

- Developed a server with Flask which interfaced with a sentiment analysis model and provided an API for real time interaction.
- · Prototyped the front end with an UI built on HTML, JavaScript, CSS.
- · Python, Flask, Socket.io

### **Weather Forecasting Model**

- Cleaned up, visualized, and transformed a time series dataset in Python, Pandas, and seaborn.
- Trained a model with 78% accuracy using Facebook Prophet and published a tutorial on GitHub.
- · Python, Pandas, Scikit-learn, Seaborn, FB Prophet

### **Education**

### Ryerson University - Expected May 2022

Bachelor of Engineering in Computer Engineering. 4.14 / 4.33 CGPA

- Software Engineering option.
- Dean's List 2018 2020.

### **Skills**

### Languages

C++, C, Java, Python, JavaScript, SQL, VHDL

#### **Databases**

Apache Cassandra, Redis, MS SQL, Firebase Firestore

### **Tools & Platforms**

Git, Docker, Debuggers, Bash, Node.js

### **Hardware Development Tools**

Intel Quartus II, NI Multisim, Altera FPGA board, lab equipment (oscilloscope, function generator, etc.)

## Leadership

### **Open Source Contributor**

Collaborated with maintainers and community to develop new features. Accepted pull requests to Netlify CMS, Material UI.

### **Ryerson Artificial Intelligence**

Developed a mobile friendly homepage for the team using React and Netlify.

### **Student Learning Support Tutor**

Ryerson certified tutor for electric circuits, programming, and calculus. Highly rated by 15 students.

### **Hackathon Mentor**

Mentored hackers at TOHacks, RUHacks, and NewHacks. Helped hackers learn and overcome technical challenges in their projects.