

# Software Developer ecyao@uwaterloo.ca | 613.254.9437

# SKILLS

### **PROGRAMMING**

Flavors of C • Python • Java • Haskell HTML/CSS/JavaScript • TypeScript • Shell

#### **TECHNOLOGIES**

Linux • Git • Docker • Kubernetes • Scripting Tensorflow • Embedded • Testing • OOD / OOP Firmware • NLP • Operating Systems • VCS

# **FDUCATION**

## **UNIVERSITY OF WATERLOO**

CANDIDATE FOR BACHELOR'S OF COMPUTER SCIENCE

Expected May 2023 | Waterloo, Ontario Cumulative GPA: 3.9

# DISTINCTIONS

2020 UW Math Dean's List (All Semesters)
 2018 ECOO CS Competition Finalists
 2018 Governor General's Academic Award
 2016 IEEE Arduino Challenge Champions

# LINKS

GitHub:// GITHUB.COM/EC-YAO
DevPost:// DEVPOST.COM/ECYAO/

LinkedIn:// EDDY-YAO

# **EXPERIENCE**

## **GOOGLE LLC** | SOFTWARE ENGINEER - INTERN

Feb 2020 - May 2020 | Sunnyvale, CA

- Designed integration testing framework to extend testing capabilities to live environments
- Implemented parser to automate config file modification and generation
- Automated service to pull production code to testing environments, removing the need for manual testing on generic builds
- Managed tickets to streamline live deployment processes and improve system visibility for back-end developers

## CIENA CORPORATION | SOFTWARE DEVELOPER (CO-OP)

May 2019 - Aug 2019 | Ottawa, ON

- Enhanced system reliability on complex, real-time fiber optics shelves
- Developed data-driven debug tool, enhancing data visibility on run-time
- Implemented structural software design changes to improve code extensibility for complex real-time computing
- Integrated data-driven programming with existing software using Yang data modeling, decreasing required code by over 50%
- Generated test cases under Python framework, ensuring overall sanity of product builds.

# INBAY TECHNOLOGIES INC. | ANDROID DEVELOPMENT INTERN Jul 2017 – Aug 2017 | Ottawa, ON

- Designed Java code for Android applications to support location awareness, allowing for accurate usage tracking for business analytics purposes.
- Updated server APIs to process and handle JSON data between client and server applications.
- Integrated Agile methodologies using Git and Atlassian software, providing thorough documentation and code re-usability.

# **PROJECTS**

### NLPY | NATURAL SPEECH PROGRAMMING LANGUAGE

- Wrote transpiler to apply natural language processing and generate code from audio clips
- Trained a deep learning model to recognize and parse natural language into nested expressions
- Implemented several scripts such as "Hello World", a sieve (Eratosthenes), and prime factorization through speech

### AR SOAPSTONE | AUGMENTED REALITY WAYPOINT SHARING

- Applied Google ARCore technology to create and share global 3D environments with AR
- Integrated GCP to host and update environments in real-time

### SERVR | JAVA, SQL, NETWORKING, GIT

- Co-developed an online platform for hosting sales transaction advertisements via Android.
- Developed personal server and client APIs to handle communications and back-end functionality.
- Implemented dynamic browsing functionality by creating a dynamic UI which grew with incoming client requests