

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

- Implemented Python parser to automate JSON file creation/modification
- Designed integration testing framework to extend testing capabilities to live environments
- 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
- Utilized internal scheduling software to design and automate deployment workflows

CIENA CORPORATION | SOFTWARE DEVELOPER (CO-OP)

May 2019 - Aug 2019 | Ottawa, ON

- Used C to enhance system reliability on complex, real-time fiber optics shelves
- Developed data-driven debug tool, improving data visibility on run-time
- Implemented several synchronization architectures to provide secure, real-time capabilities of high-level managers on embedded systems
- Leveraged Yang to automate system configuration for debugging purposes
- 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