Ian Hu

✉ ianhu952@hotmail.com
🌐 ianhu.ca
📞 (647) 627-3087
in ianhuca
○ ian952

Skills

LANGUAGES

Python
Go
Objective-C
C++
JavaScript
Java
Ruby

FRAMEWORKS & LIBRARIES

iOS
React
Node
Tornado
Rails
ASP
gRPC

DATABASES

MongoDB
PostgreSQL
SQL Server
Redis

TOOLS

AWS
Docker
Git
Mercurial

Education

University of Waterloo
Software Engineering
91% · 3.91 CGPA
Dean's Honours List
Expected Graduation:
April 2020

Work Experience

Facebook Jan. 2019 - Apr. 2019
Software Engineering Intern · Facebook Connectivity Menlo Park, California
Python, C++, Go, gRPC, Software-Defined Networking

- Implemented network service chaining on top of Open vSwitch for the open-source project, Magma, to allow dynamic service configurations from the cloud
- Improved usage reporting accuracy of the Policy Charging and Rules Function system by implementing asynchronous session termination and flow deletion
- Architected a gateway status data model for monitoring and troubleshooting
- Developed a feature to detect and alert on stale configurations in the gateway
- Designed an abstraction layer on top of OpenFlow constructs to simplify network service development and provide additional validation

Google May 2018 - Aug. 2018
Software Engineering Intern · Gmail Waterloo, Ontario
Objective-C (iOS), Java, gRPC

- Designed and shipped content insertion feature for Gmail add-ons in iOS Gmail - allowing users to insert HTML content into the email using third-party add-ons during email composition
- Implemented caching involving both the mobile client and the Java client library to reduce redundant network requests while keeping the add-ons listing updated
- Migrated client logging library to allow add-on metadata logging

Wish Sept. 2017 - Dec. 2017
Software Engineering Intern San Francisco, California
Python (Tornado), JQuery, *MongoDB*

- Built and maintained API and webhook integrations with shipping companies and third-party providers that processed millions of shipping updates daily
- Added new metrics regarding shipment tracking information to the data pipeline for more detailed alerts on delays and backlogging
- Developed internal tools for batch modification of tracking information and automatic troubleshooting of tracking problems

Remind Jan. 2017 - Apr. 2017
Software Engineering Intern San Francisco, California
Ruby (Rails), React, Go, PostgreSQL, Redis

- Integrated Appboy with the Ruby on Rails backend to track user events and trigger campaigns to send emails and push notifications
- Designed and developed a critical monitoring service in Ruby that sent metrics from Interana to Datadog for anomaly detection of funnel metrics
- Created fully tested React components using Redux and Apollo to display and modify family member information in the class member list

Ivy Global Feb. 2016 - Dec. 2016
Software Engineer Toronto, Ontario
ASP, Node, VBScript, JQuery, *SQL Server*

- Created an automatic essay feedback tool using machine learning, readability index studies, and the GloVe Word Vector project
- Developed a personalized study plan feature by analyzing over 7 million questions
- Built an online test-taking web application with an extensive permission system
- Developed a central login portal for all Ivy Global services utilizing OAuth 2.0

Awards

Canadian Computing Olympiad · **Bronze Medalist** May 2015