

# Amy Yu

## Summary of Qualifications

- C/C++, Python, PHP, Java (Oracle Certified), SQL, JavaScript

## Work Experience

- Facebook - Software Engineer  
*July 2019 – present, San Francisco, USA*
  - Worked on Facebook Typeahead to improve search and navigation on Facebook.
  - Implemented and expanded on Structured Typeahead Suggestions, to disambiguate between entities with the same name and provide more information to the searcher with images and snippets.
  - Worked on internal tools for adding new shortcuts to Facebook's products, and improved the reliability of shortcut triggering to increase impressions
  - Implemented pipelines to add new features to trigger Structured Typeahead Suggestions or boost entities to make sure they surface
- Facebook - Software Engineering Intern  
*Sept 2018 – December 2018, San Francisco, USA*
  - Worked on Forecaster, an internal tool that extrapolates timeseries to find patterns in past data to predict future trends.
  - Learned about and added new models and libraries for extrapolating data
  - Full-stack development to improve the Forecaster tool from front-end to back-end
- Microsoft - Software Engineering Intern  
*May 2018 – August 2018, Redmond, USA*
  - Independently implemented R2RDump, a commandline tool that parses .NET ReadyToRun binary executables to display assembly code, ARM and x64 UnwindInfo, and garbage collection tables
  - Investigated and learned about low-level assembly code and how binary executables are formatted and compressed
  - Worked on multi-module compilation to allow multiple .NET programs and libraries to be compiled into a single ReadyToRun executable
- Cisco Meraki - Software Engineering Intern  
*September 2017 – December 2017, San Francisco, USA*
  - Worked on embedded software for Meraki MR access points that does authentication when it connects to a switchport by sending and receiving EAP authentication packets from the switch
  - Implemented a feature that uses the SSCEP protocol for the access point to obtain a signed certificate from the CA server to use as the authentication credentials
- IBM Canada - J9 Virtual Machine Developer Intern

*January 2017 – April 2017, Ottawa, Canada*

- Worked on Project Panama, a new feature for IBM's JVM that allows Java programmers to call C/C++ functions with native method handles (a safer and more user-friendly alternative to JNI)
- Added new C++ code to the VM and new classes to the Java Core Library to implement APIs that create and invoke native method handles
- Investigated how to pass arguments and return values of various data types (primitives, pointers, structures) through the stack between Java and native methods

- SAP Canada - Core Infrastructure Developer Intern

*May 2016 – August 2016, Waterloo, Canada*

- Added fingerprint scan functionality to the SAP Kapsel Logon plugin for hybrid mobile development that allows users to unlock apps with a fingerprint instead of a passcode. This involved code changes to the JavaScript interface and the Java native side
  - Independently designed and implemented a tool that allows users to map JSON data into a HandlebarsJS template
- Bank of Canada - Web Developer Intern
- September 2015 – December 2015, Ottawa, Canada*
- Independently developed a WordPress plugin that tracked media usages throughout the five Bank of Canada websites
  - Wrote PHP scripts and MySQL queries that search and modify tables from a large database

## **Education**

- University of Waterloo
- September 2014 – May 2019*
- Bachelor of Computer Science
  - Cumulative Average: 81.52%

## **Awards and Scholarships**

- Term Dean's Honours List
  - Term average of 90.2%
- Jessie W.H. Zou Entrance Scholarship
  - Awarded to a first year female Computer Science student
- University of Waterloo President's Scholarship
  - Awarded to students with admission averages of 90-94.9%
- Sir Isaac Newton Physics Contest, University of Waterloo
  - Ranked 27th in Canada