

# Amy Yu

## Work Experience

- Facebook - Software Engineer  
*July 2019 – present, San Francisco, USA*
  - Worked on Facebook Typeahead to improve search and navigation on Facebook.
  - Led the development of the batch mentions feature to allow users to mention all group members at once.
  - Developed models for ranking typeahead suggestions based on entities features and user engagement.
  - Implemented and expanded 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.
  - Implemented APIs using k-NN to generate related videos recommendations when the user is watching a Facebook video while logged out.
- Microsoft - Software Engineering Intern  
*May 2018 – August 2018, Redmond, USA*
  - Independently implemented R2RDump, a command-line 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.
  - 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 – June 2019*
  - Bachelor of Computer Science (With Distinction)

## **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 above 90%