

**PROFICIENT:** C++, Python, TypeScript, Scheme, C, Java FAMILIAR: HTML/CSS, JavaScript, C#, Flask, Lua, Flume

# Facebook

Software Engineer Intern - Adfinder team

- Designed load stabilizer for ads requests
- Currently implementing in C++ and Apache Thrift

### Google

Software Engineer Intern - DRX Quality team

- Implemented a distributed model merger pipeline using FlumeC++ that enforces business constraints on sub-model logs for the ads auction
- Wired a new business entity into real-time bidding targeting servers for a project launch
- Explored using a binary classifier for exchange bidding prediction with TFX and FlumeC++
- Deprecated experiment flags and protobuffers and refactored legacy auction code

### Microsoft

Software Engineer Intern - Visual Studio Code team Redmond

- Built Task menu with 15k+ daily uses and Task panel using TypeScript and HTML/CSS
- Evaluated Task Runner discoverability with Application Insights, Kusto, and PowerBI
- Increased speed of process title detection 5x in the terminal for Windows by building an asynchronous C++ addon with Nan
- Implemented a terminal switcher for better work flow when using multiple terminals

### Burd

- Built a simple platformer in Lua and LOVE framework in a team of two in order to learn more about game development
- Implemented the entire physics engine from scratch and most of the backend logic
- Learnt Lua basics in a few hours

# Sentigrade

- Led the team to build a web app in Python that uses sentiment analysis to correlate Fortune 500 stock prices and tweets about them
- Used TextBlob to perform sentiment analysis using a bag-of-words model
- Implemented backend and twitter scrapers with Flask, Tweepy, and Yahoo Finance API

# **Light Painter**

- Worked in a team of four to build a <u>3D light painter arm</u> using forward kinematics for long exposure photos
- Solved the inverse kinematics and built the stabilizers
- Built with eight Mountain Dew cans, servos, LEDs, an arduino, and hot glue

# J. Wesley Graham Waterloo National Scholarship

- Up to 15 awarded nationally for distinguished math and computer science performance
- Awarded the 2nd highest scholarship (\$20,000 value)

### University of Waterloo

4A Honors Computer Science Co-op 2020



AWARDS

EDUCATION

SKILLS

**EMPLOYMENT** 

# Deltahacks 2017

Hack Western 2017

Fall 2018 **Menlo Park** 

#### Winter 2018 New York

**Summer 2017** 

Hack Western 2015

2018