

MELODY LI

CONTACT

✉ li.melody1999@gmail.com

☎ (437)-990-8279

🌐 limelody

EDUCATION

University of Waterloo

Candidate for Bachelor of
Computer Science
2017– 2021

COURSEWORK

- Object-Oriented Programming
- Computer Organization and Design (Architecture)
- Logic and Computation
- Compilers
- Operating Systems
- Probability and Statistics
- Stochastic Processes (WIP)

PROJECTS

Biquadris - C++

- Collaborated with 2 students to design multiplayer Tetris game with 5 distinct levels
- Incorporated smart pointers, design patterns, and object-oriented programming

Image processing tool - JavaScript, HTML

- Implemented 5 convolution algorithms to create filters and manipulate images, including blurs, grayscale, and edge detection
- Designed scanner algorithm to submit school assignments electronically

SUMMARY OF SKILLS

Languages : C/C++, Python, Kotlin, JavaScript, Go, Java, Bash, SQL

Frameworks: Dagger, Node.js, Nightmare.js, jQuery, Backbone.js, Flask, pandas

Tools: Git, Linux, Bazel, Eclipse, Visual Studio, AutoCAD, SolidWorks

WORK EXPERIENCE

Snap Inc.

Software Engineering Intern

May 2020 - Sept 2020

Monetization team, improving performance of web view on Snapchat Android.

- Designed application to isolate web view from Snapchat app using Kotlin, Dagger and Jenkins, allowing collection of performance metrics within 2% error bound on identical runs
- Migrated Lenses to web view with A/B testing interface to enable redirects and deep linking
- Processed 50+ terabytes of ad data with BigQuery to filter suspicious advertisers and modelled web view latency versus ad purchase rate relationship in Jupyter Notebook

Google

Software Engineering Intern

present

Intern on Hotels Search Quality team.

Engineering Practicum Intern

May 2019 - August 2019

Interned on Ads Integrity, which scans ads for malware and fights malicious advertisers.

- Designed and automated weekly vendor release process to reduce malvertising escalations using Python, C++ and Go, saving engineers 2 hours of time a week
- Configured 5 new types of querying for retrieval from ad database to allow historical versioning verification and to provide a revert mechanism
- Implemented script generation in Python and SQL to read and write to SSOT database with intent of organizing advertiser serving versions and facilitating cross-team referencing

Hubdoc by Xero

Software Developer Intern

January 2019 - April 2019

Automated document fetching from various online services for accountants and bookkeepers.

- Redesigned and reconstructed major financial service scraper using HTTP requests, collecting 6000+ documents for 5000 daily clients with 85% success rate
- Increased document fetch rate by 3x for 6 microservices with ZIP file processing in Node.js, jQuery, and Nightmare.js
- Used Backbone.js, Handlebars.js, and PostgreSQL to create database logging system and track service scheduling for company intranet

Primate Labs Inc.

Hardware Analyst Intern

May 2018 - August 2018

Worked on Geekbench, a cross-platform processor benchmarking software.

- Implemented Gaussian blur benchmark using Vulkan and OpenGL Shading Language
- Tested 20+ versions of software and developed 7 new test cases