

# Jason Pham

[jasonpham.ca](http://jasonpham.ca)

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## Experience

### Airbnb

Software Engineering Intern

San Francisco, CA

Expected: May 2019 - August 2019

### Google

Software Engineering Intern, Daydream Team

Mountain View, CA

May 2018 - August 2018

- Designed and implemented a backend service to deliver Youtube VR livestreams in Daydream Home
- Reworked Daydream and Youtube VR's frontend and backend to include a more user friendly way to launch into copresence, a way to experience YouTube VR content in groups
- Revamped Daydream Home's caching system to better serve time-sensitive content
- Integrated Youtube VR's C++ Toast messaging system to the Android Java Layer via JNI
- Rebuilt the UI promo card designs for the Daydream Home 2D and VR client variants
- **Technologies Used:** Java, C++, JNI, Android, protobuf, Bazel

### FIRST Robotics

Mentor

September 2015 - April 2018

- Built an autonomous path planning system using PID and encoder feedback loop
- Implemented a vision processing pipeline with OpenCV reducing aim time from 8.2 to 4.3 seconds on average
- **Technologies Used:** Java, Python, WPILib, OpenCV, SolidWorks CAD

### Computer Science Enrichment Club

Mentor

May 2017 - September 2018

- Teaching a competitive programming curriculum in C++ and Python
- Setting problems for UTSCode 2018, a university wide contest following ACM-ICPC rules

## Projects

More at [jasonpham.ca/projects](http://jasonpham.ca/projects)

### kotNES →

Side Project

- A high performance Kotlin Nintendo Entertainment System and MOS 6502 Emulator
- Supports native rendering output via OpenGL, Direct3D, X, and GDI
- Implements various memory mappers for support of popular games with fully timing accurate picture processing emulation and CPU instruction set

### Epochalptic →

VR Game

- Built an asymmetric Virtual Reality hide and seek game with the Unity game engine
- Implements polygon and rendering optimizations to meet the standards of SteamVR's 90 frames-per-second

## Awards & Achievements

- 1st place team out of 190, MHacks X
- Hack the North 2018 Finalist (Top 12 of 242 teams), developing a biometric 3-factor authentication device
- 1st place team out of 30, UTSCode 2017
- Member of the University of Toronto's 2016, 2018 ACM-ICPC team
- Best Emerging Platforms Hack, Hack Princeton Spring 2017
- Impact and Innovation Award, Hack Princeton Spring 2017

## Education

### University of Toronto

Candidate for Honours Bachelor of Science in Computer Science

Degree Expected: 2020