

# Christine Lee

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## EDUCATION

### CARNEGIE MELLON UNI.

B.S. IN COMPUTER SCIENCE

MINOR IN JAPANESE

Dec 2017 | Pittsburgh, PA

Cum. GPA: 3.73/4.0

Dean's List Fall 2015, Spring 2016

## LINKS

Facebook: **chrisyxlee**

Github: **chrisyxlee**

LinkedIn: **chrisyxlee**

## REL. COURSEWORK

-Operating Systems

-Compiler Design

-Algorithm Design and Analysis

-Parallel Computer Architecture and Programming (**Teaching Asst.**)

-Computer Vision

-Principles of Imperative Programming (**Teaching Asst. x3**)

## SKILLS

### PROGRAMMING

**Proficient**

C++ • C • Java • Objective-C • SML

C# •  $\text{\LaTeX}$  • PHP/Hack • HTML

CSS • JavaScript/React Native

SQL • OCaml • Python • GoLang

ProtoBuf

**Familiar:**

Assembly • CUDA • Ruby

### LANGUAGES

**Native Proficiency**

Mandarin Chinese

**Working Proficiency**

Japanese

## EXTRACURRICULARS

Piano (**YouTube**)

Study Abroad Japan Spring 2017

Bouldering

Cycling

## EXPERIENCE

### YOUTUBE | SOFTWARE ENGINEER

**Apr 2018 - Present | San Bruno, CA**

- Fighting engagement abuse (view count, likes, dislikes, subscriptions, etc.).
- Employing anomaly detection and clustering for alerting.
- Designed and implemented large-scale intra-day batch data processing pipelines for enforcement in **C++**.

### AIRBNB | SOFTWARE ENGINEERING INTERN

**May 2017 - Aug 2017 | San Francisco, CA**

- Created image compression service and library that reduces Airbnb's images to **10%** of the original file size on average.
- Implemented **structural similarity indexing** in **Java** to ensure perceptual quality after compression.
- Integrated uploading, compressing, and previewing of one-off images in admin tool using **Ruby** and **React**.

### FACEBOOK | SOFTWARE ENGINEERING INTERN

**May 2016 - Aug 2016 | Menlo Park, CA**

- Developed new continuous integration system for testing new toolchain against open source projects in **PHP/Hack**.
- Won Judge's Award at company-wide hackathon for Remembrance, a dedicated space to grieve the loss of a loved one. Developed in **React Native** and **PHP/Hack**. Presented to Mark Zuckerberg in **livestream**.

### COGNITIVE TUTOR AUTHORIZING TOOLS | RESEARCH ASSISTANT

**Sep 2014 - Jun 2015 | Pittsburgh, PA**

- Implemented tool in **Java** that allowed researchers to automatically replay large amounts of saved student responses to the cognitive tutor.

## PROJECTS

### PROPAGANDA | PARALLEL COMP. ARCHITECTURE AND PROGRAMMING

**Apr 2016 - May 2016 | Pittsburgh, PA**

- Created a parallel return-oriented programming attack generator in **C++** by using parallel search with equivalence rules.
- Solved Intro. to Computer Systems homework assignment that took a few hours to do by hand in **30ms**.

### WORD WAR | FACEBOOK UNIVERSITY IOS ENGINEERING INTERN

**Jun 2015 - Aug 2015 | Menlo Park, CA**

- Created real-time iOS word game in **Objective-C** with two others.
- Used iOS animation framework with physics, **pop**, for natural gameplay.
- Integrated **Firebase** (real-time server) and **Parse** (backend) to store game data and send messages during games.

### SCENE STUDIO | APPLIED COMPUTATIONAL INTELLIGENCE LAB AT CMU

**Aug 2015 - Dec 2015 | Pittsburgh, PA**

- Built smart program to convert user's 2D drawings into interactive 3D models in a malleable environment with Unity (**C#**) and Oculus Rift in a team of 4.
- Programmed Wiimote as natural form of input.
- Implemented ability to interact with objects in the scene.
- Tied interface and machine learning algorithm into rest of program.