

CHANG LIU, Software Engineer

● <https://cliu.github.io>

✉ liuchang972@gmail.com

☎ 412-287-1111

EDUCATION

Georgia Institute of Technology

Master of Science, Computer Science

Online | Aug. 2020 – Present

Carnegie Mellon University

Master of Entertainment Technology

Pittsburgh, PA | Aug. 2018 – May 2020

Harbin Institute of Technology

Bachelor of Engineering, Digital Media Technology

Harbin, China | Sep. 2014 – June 2018

WORK EXPERIENCE

Amazon.com Services LLC

Software Development Engineer I

Seattle, WA | June 2020 – Present

Pocket Gems, Inc. Software Engineer, Intern

San Francisco, CA | June 2019 – Aug. 2019

- Enhanced front-end quality for the web application via TypeScript and Angular 6
- Added analytics using Python and Google App Engine (GAE) to collect player activity
- Worked with PM, QA, and UI/UX to revamp the “team quest” feature in the game “[War Dragons](#)” via Angular 6 for the front end, Python and GAE for the back end. The week after its launch, player participation in this feature increased by 47%.

Carnegie Mellon University, Physics Department

Graduate Research Assistant (Game Developer)

Pittsburgh, PA | Sep. 2019 – May 2020

- Developed a game in the app “[Relatively Simple](#)” to teach people about the theory of relatively
- Built the game using Unity3D and C# with an artist who provided art assets

Carnegie Mellon University, Human-Computer Interaction Institute (HCII)

Research Assistant (Lead Game Programmer)

Pittsburgh, PA | Feb. 2019 – July 2019

- Developed a networked cross-platform game using Unity3D and C#
- Built the user management back-end system with Microsoft Azure PlayFab
- Programmed the user attraction method using Kinect SDK

ACADEMIC PROJECTS

Face-2-Face, Software Engineer | Client: [SET Lab, UCSC](#) ETC, Pittsburgh | Aug. 2019 – Dec. 2019

- Worked with the SET Lab at UCSC to build a transformational mobile game that uses facial tracking technology to help people feel more comfortable in social situations
- Developed an iOS game controlled by facial movements ([Demo Link](#))
- Implemented gameplay with facial tracking using Unity3D and ARKit

Houdini, Software Engineer | Client: [Tap Systems Inc.](#)

ETC, Pittsburgh | Jan. 2019 – May 2019

- Worked with the Tap, a wearable keyboard, to explore the potential use cases for this device
- Designed and developed 11 prototypes on various platforms (Mobile, AR/VR) using Unity3D and Tap SDK, with CAVE prototype receiving more than 50K views on [YouTube](#)
- Built and maintained our project website (<https://www.etc.cmu.edu/projects/houdini/>)

Building Virtual Worlds, Software Engineer

ETC, Pittsburgh | Aug. 2018 – Nov. 2018

- Collaboratively generated 5 immersive interactive experiences, mostly games, in 10 weeks, with 5 different creative teams of artists, programmers, and sound designers
- Programmed user input systems, game mechanics, and interfaces with Unity3D and C#, using platforms including HTC Vive, Oculus, Meta II, Leap Motion, and Jam-O-Drum
- Developed strong communication and teamwork skills, serving as a producer for one team to better understand the development process

VOLUNTEER SERVICE

HIT-COLORS, Co-Founder

HIT, Harbin | May 2015

- Founded the first LGBT+ organization at HIT