

# Tina Han

1 (412) 961-2774 | tina.han.tiantian@gmail.com

## EDUCATION

**Carnegie Mellon University, Entertainment Technology Center (ETC), Pittsburgh, PA**

**Master of Entertainment Technology**, May 2020

Coursework: Advanced Pipeline Topics (Maya, Houdini, Arnold), Production and Leadership (Audit)

**University of Toronto, Toronto, ON, Canada**

**BASc in Engineering Science**, majoring in **Electrical and Computer Engineering**, Nov 2017

## SKILLS

**Python, C#, C++, Pytest, Unity 3D, Maya, Android Studio, Git, Perforce, Agile SCRUM, Jira, Linux**

## EXPERIENCE AND PROJECTS

**Software Validation Engineer - Returnship (Python, Pytest, C, Git, Jira)**

April – Aug. 2023

**Tesla, Palo Alto**

- Created tools and developed infrastructure to support vehicle firmware developers in test writing and to improve software modeling of vehicle behavior
- Wrote and maintained validation tests for vehicle firmware to ensure coverage of specifications
- Provided code reviews for other members of the validation team

**Programmer (Unity, C#, Java, Git)**

Aug. 2020 – April 2023

**Games for Love - Remote**

- Part-time volunteer in remote group projects
- Developed traffic system and other mechanics in VR anthology game in Unity
- Debugged, organized assets, and optimized Unity game performance
- Developed basic UI architecture and frontend user login code for Android social video app

**Programmer, Co-producer (Unity, C#)**

Sept. 2019 – Dec. 2020

**My Voice, My Choice program - Highmark Health, Pittsburgh**

- Led team of five in developing VR software (Unity, Oculus Rift) for client for use in therapy
- Designed software architecture, implemented features for video clip management and transitions
- Managed communication with client, facilitated meetings, wrote documentation
- Coordinated and directed 360 video footage shooting sessions
- Application handed off to client with content and features to the client's satisfaction

**Artist, programmer (Unity, C#, Python)**

Jan. – May 2019

**PicoCTF 2019 Web Game - CyLabs, Carnegie Mellon, Pittsburgh**

- Worked with team of four creating Unity WebGL game for computer security competition
- Elected to work as artist to learn more about other roles and fill project need
- Collaborated with two other programmers, coded game functionality in Unity during crunch time
- Wrote Python scripts for automating process to generate dialogue JSON files from story script
- Created pixel art sprite sheets and animations based on game designer specifications and client feedback
- Game live September 2019 - 2020 for picoCTF competition

**Programmer (Unity, C#)**

Sept. - Dec. 2018

**Building Virtual Worlds - Entertainment Technology Center, Carnegie Mellon, Pittsburgh**

- Collaborated with five-person teams of programmers, artists, and sound designer to design and create five virtual reality experiences on VR, AR, or other mixed platforms, each completed in one to three weeks
- Developed software in Unity in collaboration with second programmer
- Three experiences selected for program's end-of-year festival

**Android Software Developer (Java, C++)**

Sept. 2014 – Sept. 2015

ModiFace Inc., Toronto

- Developed custom image enhancement Android applications in Java and C++
- Responsible for two applications from beginning of development to publishing, collaborated in 2-3 person teams of developers for three applications
- Developed application UI based on wireframes
- Published apps on Google Play and provided support and bug fixes
- Provided sole technical support on meeting with clients and hardware engineer partners to install software in kiosk prototype

**Undergraduate Research Assistant (MATLAB, Circuits)**

May – Aug. 2014

Energy-Efficient Circuits and Systems Group, MIT, Cambridge

- Laid out printed circuit board for test circuitry based on schematic
- Conducted measurements on circuitry outputs, automated with MATLAB code
- Collected data on the energy output of piezoelectric energy harvesters at different frequencies of vibration to help assess harvesters for use in industry applications and presented findings