

# Jingyu(Irene) Liu

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## Summary

Passionate about the emerging technologies that can bring users better immersive experience

## Education

**Master of Entertainment Technology**, Carnegie Mellon University (Expected) May 2016  
**Bachelor of Engineering in Electronics & Information**, Huazhong U. of Sci. & Tech. Jun. 2014

## Skills

Unity, Unreal, C/C++/C#, Java, Python, MATLAB, Maya, After Effect, Photoshop, Perforce, Linux  
Computer Vision, Computer Graphics

## Projects

**MoCap Based Education Experiment**, Entertainment Technology Center (Pittsburgh, US) Jan. 2015-Jun. 2015  
Exploring engaging education experience based on innovative motion capture platform SMALLab. The objects are 6th-8th grade students from Elizabeth Forward School District  
**Role:** Platform & gameplay programmer

**Building Virtual World**, Entertainment Technology Center (Pittsburgh, US) Aug. 2014-Dec.2014  
Creating 5 immersive user experiences using new platforms like Oculus Rift, Kinect, Leap Motion, Phidgets and etc. Working with 5 diverse team on 2 week rotations  
**Role:** Tool & gameplay Programmer, UX designer

- Got rich experience with emerging platforms, and became more skilled with Unity
- Developed more problem-solving and group-working skills

**Face Recognition and Age Estimate**, Chinese University Innovative Practice Program May 2013-Jul. 2013  
After feature extraction, PCA dimensionality reduction and classifiers' classification, judging the age of subjects  
**Responsibilities:** Analyzing extracted features and training classifier

- Got familiar with SVM classifier and feature extraction methods

## Experiences

**VR Performance Optimizing**, Philadelphia Game Lab (Philadelphia, US) Jun.2015-Aug. 2015  
Exploring the combination of multiple technical features include heart rate monitoring(Arduino) and gesture detection(Kinect) to provide novel immersive user experience based on the project Third Eye.  
**Responsibilities:** Transplanting the project Third Eye from PC & Oculus Rift platform to PlayStation 4 with Morpheus, and optimizing the performance.

- Got experienced in Unreal and platform-based VR performance optimizing skills. The project achieved stable 60fps on Playstation 4 & Morpheus.

## Research

**Media & Communication(MC) Lab**, Huazhong U. of Sci. & Tech. (Wuhan, China) Nov. 2013-Jun. 2014  
Recognizing hand gestures by judging the depth and color of the real-time-acquired pictures by Kinect. Also fulfilling a simple Human-Computer Interface

- Got familiar with depth-data processing and sensor system