# Xianling(Lily) Zhang

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## CAREER OBJECTIVE

Hello, I am a fresh college graduate currently looking for a full-time software engineer position.

## EDUCATION

**Penn State University, UP(Aug. 2013-- Dec. 2017)**
B.S. in Science, Computational Statistics
Minor in Computer Science

## KNOWLEDGE

**Robotics**
**Aerospace**
**Data Mining**
**OpenMP**
**AR/VR Dev**
**Computer Vision**
**OpenCL**
**CUDA**
**MPI**

## SKILLS

**C/C++**
**C#(Unity)**
**Java**
**Python**
**Matlab**
**Javascript**
**MySQL**
**R**
**SAS**

## WORK EXPERIENCE

(Jan. 2017 -- Dec. 2017)
**Tech Consultant -** Penn State IT Service Department
- Being attentive to customers and actively assisting them with their computer questions.

(May. 2016 -- Aug. 2016)
**Software Engineer Intern -** Journey Tech(AR Company)
- Collaborate with the optics team to continuously test out the better optical solutions in the software way.
- Develop and provide support for product demos.

(Jan. 2016 -- May. 2016)
**Research Asistant -** Penn State Translational Neurioimaging and Systems Neuroscience Lab
- Design and print 3D Models for Mice's Brain Structure
- Image Processing for the Magnetic Resonance Imaging-Brain.

(Sept. 2015 -- Dec. 2015)
**Research Asistant -** Penn State Cognition, Affect, and Temperament Lab
- Asist with behavioral, eye-tracking, EEG and RSA data collection and assisting with behavioral coding and processing of physiological data.

## LEADERSHIP EXPERIENCE

(Aug. 2016 -- Aug. 2017)
**President -** Penn State AR/VR Lab

(May. 2016 -- May. 2017)
**Software Dev Lead -** Penn State Unmanned Aerial Systems

## PROJECTS

### 1. ExplorAR: Interactive Mixed Reality Games for Location Based Modules (Present)

*My responsibilities in the team:*
- Use ARcore SDK to provide new experience to explore the world with mixed reality 3D objects.
- Embed the real-time GPS with built-in mini map in game to guide the user to destinations in different locations.

### 2. AI Based Multidimensional Data Visualization On Augmented/Virtual Reality Platforms (2017)

*My responsibilities in the team:*
- Lead the interdisciplinary team of students with various backgrounds
- Eable users to use gesture and voice commands to retrieve analyzed results and interact with each feature.

### 3. ETWIS: Voice-Command Driver Virtual Reality Game with Oculus Rift and Myo Gesture Armband(2016)

*My responsibilities in the team:*
- Designed the Networked Multiplayer mode with Photon
- Utilize open-source Speech Recognition package, CMU Sphinx4

### 4. International Aerial Robotics Competition (2016)

*My responsibilities in the team:*
- Develop and test the computer vision algorithms for aerial vehicle tasks.
- Calibrated the camera lens' angle of view(AOV), and calculated the maximum field of view for corresponding cases.

### 5. Campuspedia: iOS Mobile Game (2015)

*My responsibilities in the team:*
- Design and develop the campus map with Cocos2d-x
- Provide a serial of quests that help explore the surroundings.

### 6. Projection Mapping with Kinect (2015)

*My responsibilities in the team:*
- Programmed in Java with Kinect to detect the human gestures and movements.
- Utilizing the digital fabrication tools like the CNC machine and Laser Cutter to generate the tools for interactive installation.

## ACHIEVEMENTS

**** 2015 Code PSU, 3rd Prize***
**** 2016 Reality Virtually MIT Hackathon, Top 10 Finalist***
**** 2017 USens Developer Challenge, Top 10 Finalist***
**** 2017 HackPSU, 2nd Place of IBM Watson Prize***

## RELATED COURSEWORK

**Robotics: Perception -** University of Pennsylvania (Earned Certificate on Coursera)

**Neural Networks and Deep Learning -** Deep Learning.AI (Earned Certificate on Coursera)