

Xianling(Lily) Zhang

github@alchemz

CONTACT
alchem.jb@gmail.com
+1(814) 826 - 5806

LINKEDIN
linkedin.com/in/alchemz

WEBSITE
alchemyzons.com

ADDRESS
99 Vista Montana, #3441, San Jose, CA

CAREER OBJECTIVE

Hello, being just graduated from Penn State, I am looking for a full-time software engineer position in the automated driving field.

EDUCATION

Penn State University, UP(Aug. 2013-- Dec. 2017)

B.S. in Science, Computational Statistics
Minor in Computer Science

KNOWLEDGE

Data Mining
Deep Learning
Computer Vision
Speech Recognition
Image Processing
Parallel Computing
AR/VR Product Dev
Robotics Control
HCI

SKILLS

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

WORK EXPERIENCE

(Jan. 2017 -- Dec. 2017)

Software Team- Penn State Augmented Reality Lab

- Work on cross platforms including Microsoft HoloLens, HTC Vive.
- Integrate Multiplayer game mode with Photon Engine.

(May. 2016 -- Aug. 2016)

Software Engineer Intern - Journey Tech, Inc.

- Collaborate with the optics team to continuously test out the better optical solutions in the software way.
- Develop and provide support for VR gaming demos.

(Jan. 2016 -- May. 2016)

Data Engineering Team - Penn State Unmanned Systems

- Develop and test the Computer Vision algorithms for aerial vehicle.
- Utilize the SoC like Odroid XU3, Xilinx Zynq-7000 FPGA board.
- Program under the Linux operating systems in C++ and Python.

(Sept. 2015 -- Dec. 2015)

Research Assistant - Penn State Cognition, Affect, and Temperament Lab

- Assist with behavioral, eye-tracking, EEG and RSA data collection, and process with behavioral coding and processing of physiological data.

LEADERSHIP EXPERIENCE

(Aug. 2016 -- Aug. 2017)

Lead Software Engineer - Penn State AR/VR Lab

(May. 2016 -- May. 2017)

Lead Data Engineer - PSU Unmanned Aerial Systems

PROJECTS

1. ExplorAR: Interactive Mixed Reality Games for Location Based Modules (Accepted in CHI 2018)

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:

- Work on cross platforms including Microsoft HoloLens, HTC Vive, and Leap Motion.
- Enable users to retrieve visualized data and interact with each feature by gesture and voice commands.

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 Engine.
- 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:

- Develop the campus map game app with Cocos2d-x in C++.
- Design the game mechanics that encourage explore the environment.

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
- * 2018 explorAR accepted for inclusion in CHI 2018

RELATED COURSEWORK

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

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

Udacity Self-Driving Car Engineer Nanodegree(Ongoing)