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CAREER OBJECTIVE

Hello, being a new grad 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
ROS
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. Udacity Self-Driving Car Engineer Nanodegree

- **Traffic Sign Classifier** : use CNN and Load project on the AWS EC2.
- **Behavioral Cloning** : Apply LeNet and Nvidia CNN model and simulated in Autonomous Mode.
- **Advanced Lane Finding** : use OpenCV to compute camera calibration and distortion coefficient, generate undistored, unwarped frames.
- **Vehicle Detection and Tracking** : perform HOG feature extraction on labeled training set, and train a Linear SVM classifier.

2. 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.

3. 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.
- Enable users to retrieve visualized data and interact with each feature by gesture and voice commands.

5. 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.

4. ETWIS: Voice-Command Driven VR Game(2016)

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

6. Projection Mapping with Kinect (2015)

My responsibilities in the team:
- Programmed in Java with Kinect to detect the human gestures and movements.

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)