# Tianren(Silver) Zhang

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#### **Education**

#### University of California, Irvine

B.S • COMPUTER ENGINEERING • GRADUATION DATE: JUNE 2019 • GPA=3.2

#### **Programming Skills**

Language: Java, C++, Python, C, GO, SQL, Javascript, HTML, CSS, Javascript, PHP, System Verilog; Used Frameworks/Libraries: Django, Spring MVC, OpenCV, Tensorflow, Numpy, Pytorch, Pandas, SciPy.

## **Experience**

#### ♦ Software Engineering Intern. Shanghai Qiadao Internet Inc.

February - June 2015

- •Participated in development of Android platform of a question-answer app on which users can ask, answer questions and reward the most satisfying answers with a small amount of money;
- •Used **Android Asynchronous Http Client** to accomplish data communication with Java backend and used Alibaba's "**Fast Json**" to parse and construct data in Json format;
- •Implemented voice-to-text function for user's inputs with voice recognition API of IFLYTEK and multitask internet picture loading with "Imageload" API;

### **Independent Projects**

### **♦** Dataset Processing: Silverset [PIL, Numpy, Keras, Urllib]

May 2018 - Now

- Made python library for Machine Learning learners to easily get the most common image datasets with only two lines to download and process the datasets or just turn the datasets into numpy arrays;
- Integrated seven most most popular datasets including cifar, Caltech, Pascal etc, it still keeps extending so far;

# ♦ IoT: Smart Mirror [Raspberry Pi, Alexa, Google Voice, Sensors] May 2018 - June 2018

- Made a smart mirror with **Raspberry Pi** which is able to keep detecting light, motion and temperature around;
- Implemented **voice interaction** that allows users to switch mirror's mode with voice and talk to **Alexa API**, enabled the program to automatically send alert emails to the owner when detecting exceptions;
- Implemented **multithreading** so that while the program is updating the interface, it keeps reading data from sensors through GPIOs and listening user's voice command to make operations.

# **♦** Game Development:Bipi Ball Game [UE4, C++]

June 2016 - October 2016

- Used **Unreal Game Engine** to develop a 3D mobile game in which the gravity sensor is exploited to control the movements of the character, implemented game logic with C++;
- Developed AI characters in the game that could find their own paths to help or attack the player;
- Participated in designing mechanisms and drawing models of all the 36 levels in the games.

# ♦ Full Stack Web Development: Note-Sharing Platform[Django, Mysql, Ajax]March 2016 - June 2016

- Developed a platform(Mobile and Website) where students can get rewarded in money by sharing their class notes and finding the notes they need.
- Used **AWS** to host application's server with **Ubuntu** system, implemented data process on server based on **Django framework**, stored and organized user data and backend's contents with **MySQL** database;
- Developed Android client app and finished website frontend which covers **keyword synchronous** searching, multiple files transfer with Javascript, Jquery and Ajax;

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