Website: <u>yiyanjz.github.io</u>

#### **EDUCATION**

University of California, Merced, School of Engineering Expected Graduation: May 2020

*Major*: B.S. in Computer Science and Engineering GPA: 3.3

Minor: Business and Management Honors: Dean's List

**Computer Science and Engineering Relevant Courses**: Algorithm Design and Analysis, Data Structures, Operating Systems, Intro to Object Orient Programming, Introduction to Artificial Intelligence, Discrete Mathematics, Computer Organization and Assembly, Computer Graphics, Computer and Networks Security

#### **SKILLS**

Programming Language: Python, HTML, CSS, Java, JavaScript, C++, Swift

Machine Language: Arduino, Raspberry Pi, Python Flask

**Operating System:** Windows XP, Windows 7,8,10, Mac OS, Linux, Ubuntu **Spoken Language**: Fluent – English and Mandarin, Professional – Japanese

#### **EXPERIENCE**

## University of California Merced | Full Stack Software Engineering Intern Research February 2020 – May 2020

- Created a server/website using HTML and CSS connecting it to Raspberry Pi as a Frontend
- Written code in python through Python Flask as a Backend controlling the Raspberry Pi
- Mentee under a former Google Employee learning both Frontend and Backend mechanics

## Lawrence Livermore National Laboratory | Data Scientist Intern

May 2019 – July 2019

- Analyzed large dataset using python through reinforcement learning and applying it to real-life simulations
- Coded a policy in virtual environment visualizing the neural network through graphs and decision trees
- Utilized all git commands as main source of sharing resources between teams

# University of California Merced | Machine/Reinforcement Learning Laboratory March 2019 – August 2019

- Utilized libraries from Amazon Web Service (AWS) and Intel coach environment package as a base for HAVC (Heating, Ventilation and Air Conditioning)
- Designed and built multiple Deep Reinforcement Learning models for controlling HVAC, light, and window system in a whole building simulator;
- Implemented and modified Deep Q Network, Dueling Deep Q Network and Branching Dueling Deep Q Network to adapt for high-dimension action tasks by using Python, TensorFlow and Gym;

### **UC Merced | Networked Embedded Systems Research Laboratory**

September 2018 - March 2019

- Modified wireless sensors LoRA and LoRaWan expanding the network server
- Implemented C/C++ through Arduino connecting hundreds of sensors and modifying it individually
- Operated with TCP/IP LoRaWan to connected Gateway accessing the network server

### **CS PROJECTS**

### App Developed - KeepUpWithLife

February 2019

- Developed a to-do list with easy interacting UI for daily life usage
- Designed and written in Swift, consumes a Core Data Stack which helps manage and save to-do's

## Backend/Frontend - TruckAlert - Bihai Empreedimentos e Participaçõs Ltda

February 2019

- Developed an app for a company that provides relevant information to assists trucker
- Collaborated in a team of 3 storing database in SQL and GIS using Django
- Implemented Map Quest API and Leaflet plug-in for map visualization and re-calculation

### **Google Extension – Introduction to Google Chrome**

September 2018

- Designed two UI popup satisfying Mac and Windows users walking them through basic shortcuts of Chrome
- Implemented CSS and HTML through Visual Studio Code to design both user interface

## **Game Developed – Monster Fighter**

**April 2018** 

- Designed and created 2D role playing action game and generated graphics by using C++ and OpenGL
- Applied Object-oriented Programming concepts: encapsulation, composition, inheritance, and polymorphism

#### **LEADERSHIP**