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

#### **EDUCATION**

University of California, Merced, School of Engineering Graduation Date: June 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

February 2020 - June 2020

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

# Lawrence Livermore National Laboratory - Data Scientist Intern

May 2019 – July 2019

- Analyzed large data-set 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 Intern

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;

### University of California Merced - Networked Embedded Systems Intern

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**

### **Full-Stack Web Application - Hospital Management**

December 2019

- Developed a full-stack web application platform allowing the user to Create, Read, Edit and Delete (CRED) data
- Used Python Flask to import large data from CVS and used MySQL as a database to store users information
- Utilized JavaScript for front-end and used BootStrap, HTML, CSS as well to design the front-end

### IOS 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 pop-up 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