# HONGTAO (FABER) LIU

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### **EDUCATION**

University of California, Irvine

B.S in Computer Science

June 2017

GPA: 3.49

Specialization: Information

Coursework Highlights: Algorithm Design and Analysis, Artificial Intelligence, Computer Vision,

Machine Learning, Data Management, Socket Programming, Embedded Systems

## **SKILLS**

• 5 years with Java

• 3 years with C++ and Python

Database: MySQL, MongoDB

• **Programming**: C, HTML, JavaScript,

OOA/OOD/OOP, Assembly

• Framework: Spring, Vue,js

• Applications: Amazon AWS, Selenium, etc.

• Tools: Git, IntelliJ, Eclipse, PyCharm, Docker

• Languages: Fluent in Mandarin and English

• Interests: Photography and Filming

#### **PROJECTS**

## Reward-Finder | AI in Minecraft

June 2017

Programmer, Designer

https://moe202.github.io/Reward-Finder/final.html

- Reward-Finder is a project that bases on Microsoft's Project Malmo
- Designed mazes with hazards in XML and taught Malmo agent to explore mazes
- Analyzed agent's performance by using numpy and mathplotlib
- Implemented and optimized Q-learning algorithm to maximize reward gains
- Designed and wrote project website using HTML, CSS and Markdown

Fabflix March 2017

Programmer

- Managed teams of 3 programmers to design and develop a web-based application that allows users to browse and search for movies and purchase movies
- Implemented SQL logic to allow Auto Complete Search and Blurry Search
- Implemented Connection Pooling, Master and Slave Instances to optimize Fabflix's performance

## SolarLab - A Cloud-Based PV System Intelligent Design Software

Programmer, Member of the Founding Team

May 2018 - Present

- Designed and developed a PV System Design Web Application using Spring Boot, Vue.js and CesiumJS
- Developed algorithms to compute PV panel layout based on environmental parameters
- Optimized MySQL database to enhance of the application's performance
- Developed test cases and automated test scripts to ensure the quality of the application

#### **EXPERIENCE**

Illuminate Education Irvine, CA

*OA Developer – Intern* 

*September 2017 – May 2018* 

- Designed test cases and developed automated test scripts based on specifications
- Implemented test cases using manual testing techniques
- Performed functional, smoke, integration and regression testing on applications
- Created a frontend automation framework based on Selenium/Robot Framework
- Utilized JMeter and developed JMeter scripts to functional test Restful Microservices
- Developed automated test scripts in Java to enhance the efficiency of quality assurance process