# SITONG LIU

#### **EDUCATION**

University of Washington Sep. 2019 - Jan. 2021

Master of Science in Computer Science and Systems

Southern University of Science and Technology

Bachelor of Engineering in Computer Science and Technology

Sep. 2015 - Jun. 2019

### **EXPERIENCE**

### Research on applying gamification in software engineering

Southern University of Science and Technology

Mar. 2019 - Jun. 2019

Advisor: Shin Hwei Tan

- □ Independently designed and developed a website that used in *Software Testing* course to study the application of gamification in software engineering; combined Test Driven Development to design the game mode.
- □ Utilized **Django**(Python), **Java** and **MySQL** to implement the back end: students can write and submit **JUnit** tests online, and the server will judge their codes and return the result instantly with **AJAX**; implement front end with **HTML**, **CSS**, **JavaScript** and **JQuery**.
- $\square$  80% of students considered it better than the traditional approach; improved average exam grades by 12%.

## **PROJECTS**

# **NASA International Space Apps Challenge**

Oct. 2019

- □ Made use of data from NASA, employed **React.js** to develop a website that visualizes the change of sea level, temperature and other indicators over the past decades.
- □ Created a more intuitive and impressive way to show the climate change.

#### CITI(Citibank) Financial Innovation Application Competition

Oct. 2018 - Nov. 2018

- □ Built a web-based Bitcoin quantitative investment platform, where users can backtest their quantitative investment strategies, and share their strategies and backtesting results with other users.
- □ Employed **Django** back end, integrated backtesting codes in python from teammates; Utilized **Bootstrap** to build a responsive website; employed **Echarts** to visualize various technical analysis indicators of Bitcoin.

### In-flight Entertainment(IFE) System

Mar. 2018 - Jun. 2018

- □ Applied **MVP** pattern with **Java** GUI library **JavaFX** to develop an IFE system with features of both keyboard and mouse controlling, video playing, appearance customizing and multi-language selecting(properties file) for passengers, and data management, automatically data crawling for administrators.
- ☐ The project gained the highest score in *Computer System Design and Application* course.

# Interdisciplinary Contest in Modeling(ICM)

Mar. 2018

Area Division of EV Charging Stations Model for Site Selection

- □ Considered the cost of constructing charging station, drivers' energy consumption to calculate the cost of charging; used web crawler to obtain required data, and implement the *Genetic Algorithm* and *Simulate Annealing* in **Python** to find the minimum cost, therefore get the best distribution of EV charging service.
- $\Box$  Completed all programming in this contest individually; Our team gained the award of Meritorious Winner(top 10%) in ICM with our excellent performance.

### **SKILLS**

Languages
Tools & Frameworks

Java, Python, JavaScript, HTML, CSS, C++
Django, MySQL, React, JQuery, JUnit, JavaFX, Git, Bootstrap, Echarts