SITONG LIU

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EDUCATION

University of Washington Sep. 2019 - Jan. 2021
Master of Science in Computer Science and Systems
Southern University of Science and Technology Sep. 2015 - Jun. 2019
Bachelor of Engineering in Computer Science and Engineering

EXPERIENCE

Research on applying gamification in software engineering Mar. 2019 - Jun. 2019
Southern University of Science and Technology *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**.
- 80% of students considered it better than the traditional approach; improved average exam grades by 12%.

PROJECTS

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.

Visualization of P2P Network Apr. 2018 - Jun. 2018

- Improved the P2P plug-in of *Lixiang Computing Co., Ltd.*; responsible for the visualization of P2P network
- The project was written in **React**; employed JavaScript library **vis.js** to show the topological graph of P2P nodes and displayed the information about the ISP and bandwidth of each nodes.
- Updated the graph in real time when different network nodes start and end a P2P connections.

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 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.
- 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	Java, Python, JavaScript, HTML, CSS, C++
Tools & Frameworks	Django, MySQL, JQuery, JUnit, JavaFX, Git, Bootstrap, Echarts