

# SITONG LIU

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## EDUCATION

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### 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

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### 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

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### 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.
- Completed all programming in this contest individually; Our team gained the award of Meritorious Winner(top 10%) in ICM with our excellent performance.

## SKILLS

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### Languages

Java, Python, JavaScript, HTML, CSS, C++

### Tools & Frameworks

Django, MySQL, React, JQuery, JUnit, JavaFX, Git, Bootstrap, Echarts