shilong.lij@gmail.com github.com/slljack (949)-656-9618 shilongli.com

### **EDUCATION**

**State University of New York at Stony Brook** 

August 2021 – Expected May 2024

M.S. in Computer Science

State University of New York at Stony Brook

**August 2016 – May 2021** 

B.S. in Computer Science & Applied Math and Statistics

# **EXPERIENCE**

## **COSCO Shipping**

Software Development Engineer Intern

**September 2022 – Expected December 2022** 

• Developed an algorithm that predicts the ship's cargo volume given the Draft and the Deadweight tonnage with about 80% accuracy. Also utilized the algorithm to determine the ship's loading status and detect the unmarked ports or Floating Storage such as FSO and FPSO.

#### Rescond

Software Development Engineer Intern

**June 2021 – September 2021** 

- Designed and built the UI and functionalities of in-hospital defibrillator and ECG in QT Creator with C++. Greatly boosted the running speed and memory usage by applying the logic of state machine and proper data structures.
- Developed digital-to-analog programs for generating electrocardiogram at different heart conditions and helped pass more than 100 tests.

### **Stony Brook University**

Research Assistant at Ethos Lab - Principal Investigator: Amir Rahmati

May 2019 – December 2020

• Analyzed and optimized Machine Learning related projects and made improvements over 10 real-world projects with a weekly presentation in a team of four.

## **PROJECTS**

**Master's Student Tracking** 

May 2021

JavaScript with Node.js, MySQL—Registration system manages master students' classes and graduation status.

- Designed the User interface and functionalities made the system convenient and powerful.
- Set up the database and made strong extensibility functionalities connected to the database.

Frugal\_ML May 2019 – May 2020

Python, Java—Image recognition and malicious URL detection Deep learning program runs on Android devices. Worked with Professor Amir Rahmati and two other PhD students in a team of four.

- Improved models' performance and optimized the code by comparing with cutting edge papers.
- Used ADB commands and monitored Android devices performance status, and the four monitor properties are CPU, Memory, Battery and Temperature.
- Collected data and drew graph to find the tradeoffs to improve performance.

## The Brave Twin Knights

May 2020

TypeScript—2D Puzzle-Platformer made with Gulp and Phaser.

• Designed and implemented multiple puzzle mechanics with proper physics in each level in a team of three and won Top 3 at SBU 16th Annual Game Programming Competition.

### **Online Stock Trading System**

May 2019

MySQL, Java—Stock trading WebApp with database designed with MySQL runs on Tomcat.

• Designed robust queries for transactions in MySOL and linked them to the web user interface.

### **SKILLS**

### **Technical Skills**

• Java, Python, C, C++, JavaScript, Ruby, Swift, Unix/Linux, MySQL, HTML, CSS

### **Language Skills**

Mandarin