# Christopher Luo

69 Brown Street, Box 3813, Providence RI, 02912 • (401) 871-7485 • christopher\_luo@brown.edu

Website: https://cdluo.github.io/

## Education

#### Brown University - Providence, RI

-Database Management Systems

- -Cybersecurity and International Relations
- -User Interface Design
- -Introduction to Software Engineering
- -Introduction to Systems
- -Introduction to Algorithms and Data Structures
- -Introduction to Object Oriented Programming

# Experience

# **Teaching Assistant (Cybersecurity and International Relations)**

Spring 2017

GPA: 3.35

Computer Science ScB

Graduation: May 2018

- Course focuses on both the technology and policy behind modern cybersecurity.
- Technical topics include: CPU/RAM architecture, OS/Application security, Networking protocols.
- Developing course resources, holding hours, and leading discussion sections.

## **B+ Tree (Database Management Systems)**

October 2016

- Implemented B+ Tree data structure for database indices.
- Analyzed performance with different sorting algorithms and node fanout sizes.

## To the New World (Personal Project)

August 2016

- Researched and created server to simulate world trends in population.
- Deployed project and converted database (PostGreSQL) on Heroku.
- Developed frontend interface with HTML, CSS, Ajax, jQuery, and other JS libraries.

#### RubberMallet (Bridgehacs Hackathon)

August 2016

- Pitched idea and managed a team of 5 to its completion.
- Used MALLET Java package to train topic models on raw text. Visualizes topic models.

#### **Maps (Introduction to Software Engineering)**

April 2016

- Wrote code to communicate with traffic server and process user queries from front end.
- Visualized sqlite database into a scrollable map, among other front end features.

#### **Agent32 (Introduction to Software Engineering)**

March 2016

- Worked in team of 4 to pitch, follow-up, and present our project to the professor.
- Front-End Engineer: Designed, implemented, and connected entire front end of a web game applet.

#### **MALLOC** (Introduction to Systems)

November 2015

• Implemented MALLOC in C

## Heap, ConvexHull, Graph (Introduction to Algorithms and Data Structures)

Spring 2015

- Implemented data structures in Python with restrictions on allowed functions.
- Analyzed and wrote algorithms to utilize these data structures.

#### Skills

- CS Languages: (Proficient) Java, HTML, CSS, JS, SQL; (Familiar) C, Assembly, Python
- Languages: (Fluent) Mandarin Chinese; (Familiar) Spanish
- Communication skills: Active blogger, strong background in literature and history coursework.
- Campus Activities:
  - -RUF Christian Fellowship Small Group Leader: Weekly 1-1 meetings and bible study leader.
  - -Employment: Campus Dining Worker (Former) TA (Current)
  - -Co-founder/President of Brown Pokemon Club. Co-founder of Brown TableTop Club.