# LIJUN (Lily) GAN

# Software Engineer

P. 347-819-1883 | lilv.gan.lijun@gmail.com | LinkedIn | Github | Portfolio | New York, NY

# SKILLS

Python, R, Golang, JavaScript, Ruby, SQL, HTML, CSS, Ruby on Rails, React, Redux, Fiber, Mongoose, MongoDB, Node.js, Express.js, GraphQL, SQLite3, PostgreSQL, Webpack, jQuery, Git, Heroku, API, D3, Socket.io, AWS S3, WebRTC, AJAX, DOM, VBA.

# **PROJECTS**

Amazen | ( React, Redux, Ruby, Ruby on Rails, AJAX, PostgreSQL, CSS, HTML, Javascript, JBuilder )

Live Site | Github

- A full-stack single-page app clone of Amazon for users to browse, purchase, and review books.
  - Implemented custom user authorization on both frontend and backend that checks for proper sign-up and log-in credentials, keeping track of the current user and all functionality dependent on the session status.
  - Ensured each book's average review dynamically changes on created reviews utilizing the consistency of the Redux store, providing real-time feedback to the user.
  - Optimized database usage and eliminated N+1 queries by observing SQL and Active Record best practices, for example, by pre-fetching associations.

**Blockup** | ( Mongoose, MongoDB, Express.js, Socket.io, WebRTC, Node.js, React, CSS, AWS S3, Javascript ) Live Site | Github A MERN Communication App - A 2FA-enabled web app supporting text chat, voice chat, and video chat.

- Used Speakeasy.js to create Time-based One-Time Passwords (TOTP) to implement Two-Factor Authentication (2FA), providing the user with a secure line of communication.
- Utilized Socket.io to serve communication between users, allowing real-time communication through various channels, such as video chat or speech to text.
- Constructed a dynamic and responsive UI using React components for making friend requests and creating chat rooms.

#### **Covid-off** | ( Javascript, D3.js, Canvas, CSS, HTML )

Live Site | Github

An interactive Coronavirus dashboard for tracking vaccinations and cases for different countries.

- Connected dashboard UI to third party API, allowing users to visualize the covid-19 data of various countries by interacting with the map.
- Dynamically generated graphs and charts of relevant data utilizing D3 based on the user's input selections.
- Leveraged Vanilla Javascript event listeners in order to handle user interaction with the UI, maintaining a lightweight code base without using external libraries.

#### **EXPERIENCE**

#### **Teaching Assistant and College Assistant (Programming for Analytics)**

Baruch College

Feb 2019 - Dec 2020

- Helped over 150 students to improve their problem-solving skills in programming and math by meeting individually and in small / large groups.
- Provided assistance to leveraging the power of Python to handle various data analytic tasks such as data wrangling.
- Offered feedback on the fundamental tasks involved with modeling, designing, and implementing a database application, ensuring thorough understanding and best practices.

#### **IT Support Intern and Research Intern**

NYU Langone Health

Feb 2020 - July 2020

- Attended daily meetings to review the regression testing accomplishments and efforts of the MCIT QA team for the LabVantage 8.4 Upgrade project.
- Effectively utilized the bug tracking applications for reporting and monitoring for the laboratory information management system, correcting all bugs within 24-hours of reporting.

# **EDUCATION**

**App Academy -** Intensive, 16-week Software Engineering Bootcamp with a focus on full-stack Web Development **Baruch College, Zicklin School of Business** 

April 2021

Master of Science in Information Systems, GPA: 3.974/4.0
Coursework: Data Warehouse (SQL, NoSQL, OracleDB), Natural Language Process (Python)

Fall 2020

Bachelor of Business Administration in Statistics and Quantitative Modeling, GPA: 3.913/4.0
Coursework: Object-Oriented Programming (C++), Data Mining (R), Data Analytics (Python)

Spring 2019

Honors & Awards: Dean's List, Women in Technology and Entrepreneurship in New York Grant