

# Hongyu Li

(919) 260-5819 | lihongyu148267448@gmail.com | linkedin.com/in/hongyul

---

## Education

### University of North Carolina at Chapel Hill

May 2021

B.S. in Computer Science

B.S. in Environmental Sciences, Concentration in Energy Management

Minor in Entrepreneurship

GPA: 3.7

---

## Skills

**Technical Languages:** Python, Java, JavaScript, Html/CSS, C, C++, Clojure, MATLAB, SQL

**Technologies:** Git, Pytorch, Node.JS, Express, React.js, MongoDB, REST, Docker, Azure, Unity

**Foreign Language:** Chinese

---

## Work Experience

### Software Engineer Intern | Jitsuin, Inc

January 2021 – Present

- Work on product use case samples by building **Python SDK** that allows the use of **REST API**
- Improve the quality of code by building on **Docker image**, installing and maintaining **PyPi** package, **pylint** and **pep8** scanning, docstrings documenting and stable interfaces
- Create new use cases and **APIs** connecting to the company platform, Archivist
- Host SDKs and APIs in **Azure**; develop, deploy and update via feedback and daily stand-up meeting

### Research Assistant | Department of Computer Science

May 2020 – Present

- Created an NLP program detecting sarcasm in languages and improved the accuracy by 10% through machine learning model developing cycle using **Python**, **Pytorch** and NLP models
- Work on a research project that creates a better dataset for closed-book question answering
- Build a question answering trivia web application to collect question-answer datasets using **Node.js**, **Express**, **MongoDB**, **HTML/CSS**

### Technology Analyst Intern | Credit Suisse Group AG

July 2020 – August 2020

- Constructed a web-based modeling application to detect anomalies in trading volume of financial products and help the bank from being fined for misreporting
- Preprocessed historical trading-volume data and built time-series forecasting models such as AR, SARIMA with **Python**, **Statsmodel**, and **SQL** to predict future trading volume
- Developed a web-based user interface to visualize data and models with **Plotly**, **Dash**, **HTML/CSS**

---

## Projects

### Herbarium Map | Software Engineering Lab

August 2020 – November 2020

- Work in a team of three, the client and mentors to develop a web-based interactive map showing the access records of plant specimens at UNC Herbarium using **React.js**, **MongoDB** and **Node.js**
- Build the interactive user interface using **React.js** and **Mapbox** to display access information
- Secure funding for UNC Herbarium by showing the value of the plant collections through the map

### Idiot | Software Architecture

January 2020 – May 2020

- Developed a simplified version of Git, “a stupid content tracker” called *Idiot*
- Implemented some basic Git commands using **Clojure**: creating objects, storing them in branches, and displaying contents in a web server
- Practiced software design techniques including testing, debugging, and refactoring

### UNC EUI Map | ENEC Capstone

August 2019 – December 2019

- Researched and developed methodologies to set target EUIs for all buildings on campus
- Developed a website for UNC EUI (Energy Usage Intensity) map, embedded with Online ArcGIS Data, using **HTML/CSS**, **ColdFusion**, **APIs**, **SQL**, and **Tomcat**, to present campus energy usage conditions and calculate target EUIs through the methodologies developed

### Building Competition | UNC Facilities Services

August 2019 – December 2019

- Planned, organized, and managed an energy-saving competition between two buildings
- Constructed a website for campus building competitions using **HTML/CSS/JS**, **Node.JS**, **Express**, **Restful**, and **MongoDB** to present data, methodologies and strategies
- Analyzed energy data and other factors of the two buildings, finding a 5% reduction in energy usage