

Yijun Cheng

Email: yijunc1218@gmail.com | Tel: 6083340732 | Location: Los Angeles, CA

Education

University of California, Los Angeles

Master of Science in Computer Science

Sep. 2021 — Present

Overall GPA: 3.68/4.0

University of Wisconsin-Madison

Bachelor of Science in Computer Science & Applied Mathematics

Aug. 2018 — May. 2021

Overall GPA: 3.88/4.0

- Honors: Graduated with Distinction

Selected courses: Operating System, Machine learning, Graphics, Database, Network, Algorithm, Big Data Analytics, Cloud Computing, Software Engineering, Optimization, Stochastic Process, Numerical Analysis

Experiences

Software Engineer Intern, Relaymile, Alameda, CA

Apr. 2022 — Jul. 2022

- Developed an interactive system using **Flask** for the shipment broker companies to manage their loads. Implemented the functions of posting, scoring, and contract signing between the brokers and carriers.
- Managed data with **PostgreSQL** in **Docker** and saved contract changes using the **AWS bucket**.
- Developed a GPS location tracking system that can support more than 1000 shipment companies to track the carrier's location in real-time using the **HTML Geolocation API**.
- Developed testing tools using **Unittest** to perform integration testing and bug fixing.

Course Tutor, UW-Madison CS Department, Madison, WI

Sep. 2020 — Dec. 2020

- Tutored for the principle of **Regression** and **Clustering** algorithms in discussion session of AI course.

Research Assistant, CMU

Apr. 2020 — Jul. 2020

- Optimized the sentiment analysis model using **LSTM**, analyzed and compared its performance with models based on **Naive Bayes**. Wrote scripts using **Selenium** for web scraping to collect data for analysis.
- Performed data cleaning and preprocessing on **1 million** geolocation datasets with **Python**; visualized datasets on **Tableau** and developed anomaly checking model using **DBSCAN** for invalid data detection.

Technical Evangelist Intern, Microsoft China, Guangzhou, China

Jun. 2019 — Jul. 2019

- Developed a Chat Robot using **Luis API** and **QnAmaker** on the Microsoft **Azure** Bot Framework environment. Implemented conversation flow for Chat Robot to analyze semanteme using **C#**.
- Deployed the Chat Robot on the WeChat interface using **Node.js** to chat with users.
- Trained a risk analysis model with **Decision Tree** to analyze and rate the data collected by the chatbot.

Projects

Trip Planner App (LazyTrip)

- Developed a **full-stack**, fully functional web application to help users automatically plan travel itineraries.
- Implemented the frontend with **Vue.js**, applied **Google Maps API** to present geographic information.
- Implemented the backend with **Django REST Framework**, applied **Scikit-learn** to implement the **KNN** classification for trip route planning. Achieved data management of users' travel itineraries using **SQLite**.

Single Machine MapReduce

- Developed storage mechanisms for MapReduce framework to improve data processing speed.
- Implemented **thread creation**, **mutual exclusion** (with locks), and **signaling**/waiting to build a simplified version of the MapReduce framework that can support efficient **concurrency**.

Course Projects

- **BadgerOS:** Reprogrammed **Xv6 kernel** to support multi-level queue scheduling for processes, and implemented a **Unix shell** on the Multiprocessing environment in **C**.
- **Iperfer:** Implemented a customized version of **Iperf**, to measure network bandwidth through **TCP** protocol.

Skills

Programming Languages: Java, Python, C, C++, C#, JavaScript, HTML, CSS, MySQL, MATLAB

Framework/Tools: Linux, Git, Flask, Django, Vue, React, AWS, Tableau, TensorFlow, PyTorch, WebGL