🗣 Atlanta, GA 🤳 (530)648-7910 🗷 kvnyijia@gmail.com 🛅 linkedin.com/in/kvnyijia 🞧 github.com/kvnyijia 🧥 kvnyijia.github.io

Skills

Programming C++, Python, Java, Scala, JavaScript, React, React Native, Node.js, HTML, CSS, SQL, C, C#

Technologies MongoDB, Express, MySQL, Docker, AWS, Flask, jQuery, REST, AJAX, Linux, Git **Others** Fullstack, Mobile, Machine Learning, Parallel Computing, Distributed Systems

EDUCATION

Georgia Institute of Technology

Aug 2021 - May 2023

Master of Science in Computer Science, GPA 3.6

Atlanta, GA

Database (MySQL), Machine Learning (Keras, scikit-learn, NumPy), Mobile (React Native),
Data & Visual Analytics (Scala, Spark), Blockchain & Cryptos (Solidity, Web3.js)

National Cheng Kung University

Sep 2015 – June 2020

Bachelor of Science in Computer Science, GPA 3.5

Tainan, Taiwan

• Object Oriented Programming (C++, C#), Data Mining (Python), Data Structures, Algorithms

WORK EXPERIENCE

Georgia Institute of Technology

Aug 2022 – Dec 2022

Graduate Research Assistant

Atlanta, GA

- Implemented message-passing programs for distributed systems using actor model with C++ parallel programming library HClib.
- Researched HClib-Actor programs, and documented the usages of its primitive constructs.

Academia Sinica July 2020 – Dec 2020

Research Intern Taipei, Taiwan

- Researched Brzozowski's derivative and parser combinators to construct context-free parser using functional programming with Haskell.
- Programmed a course website for the instructor to deliver materials to 100+ undergrads with Haskell.
- Performed formal verification using type systems with interactive proof assistant Agda.

PIXNET Digital Media Corporation

Aug 2019 - Dec 2019

Data Analyst Intern

Taipei, Taiwan

- Created dashboards to uncover marketing insights with BigQuery, Data Studio, Python, R, and D3.js.
- Automated the process of importing data from Google Sheets to **BigQuery** with **Matillion ETL** and **Python**.
- o Proposed new website layouts to improve user experience and ad revenue by analyzing clickthrough rate.

Key Projects

"THE ONE" – Interactive Book Recommendation System

Oct 2021 - Dec 2021

Fullstack Web Application, Machine Learning [github]

- Launched the website that retrieved data from Flask backend by performing AJAX requests with jQuery.
- Designed frontend with interactive visualization to display popular books with **D3.js**.
- Preprocessed text data, and developed book recommender by creating NLP model with **scikit-learn** and **NLTK**.

Banking Management Service System

Apr 2022 – May 2022

Fullstack Web Application

- Collaborated with teammates to construct backend that conformed to **REST APIs** using **Node.js** (Express.js) and design responsive frontend using **React.js**.
- Implemented stored procedures and virtual tables to manipulate data and display stats using MySQL.

"Taste" - Mobile App for Finding Restaurants Based on Personal Preference

Oct 2022 - Dec 2022

Mobile Application [github]

- o Built and designed the frontend with **React Native**, and developed map features with **Google Map APIs**.
- Collaborated with teammates to integrated the app with backend that conformed to REST APIs using Flask and Postgres.

Air Quality Data Collection, Analysis, and Prediction from Scratch at NCKU

May 2019 - Sep 2019

Data Analytics, Machine Learning [github] [CLI]

- Won **3rd Place** in 2019 CSIE Department Research Project Competition.
- Created a CLI tool for data visualization with **Python** to analyze air quality patterns.
- Presented PM 2.5 forecasts with deviation < 28% by training machine learning models, including regression and time series analysis.
- Worked in group to containerize **MongoDB** and **Flask** server with **Docker** for data storage and retrieval; collected **4-month** meteorological data using sensors paired to **Arduino**.