♥ Atlanta, GA 🜙 (530)648-7910 🚾 kvnyijia@gmail.com 🛅 linkedin.com/in/kvnyijia 🌎 github.com/kvnyijia 🧥 kvnyijia.github.io

Skills

**Programming:** Java, JavaScript, Python, C++, C, C#

**Certifications:** AWS Certified Solutions Architect Associate (2023)

Software: Docker, Kubernetes, MySQL, SQL Server, .NET, Unix/Linux, Git

Fullstack: MongoDB, Express, React, React Native, Node, Flask, REST, HTML, CSS, jQuery, AJAX

**EDUCATION** 

Georgia Institute of Technology

Aug 2021 - May 2023

Master of Science in Computer Science, GPA 3.6

Atlanta, GA

o Coursework: Mobile Applications, Database, Machine Learning, Data Analytics (Spark, Scala, Databricks)

**National Cheng Kung University** 

Sep 2015 - June 2020

Bachelor of Science in Computer Science, GPA 3.5

Tainan, Taiwan

o Coursework: Object Oriented Programming, Computer Architecture, Operating Systems, 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

- o Constructed context-free parser using Brzozowski's derivative and functional programming with Haskell.
- $\circ \ \ Programmed \ a \ course \ website \ for \ the \ instructor \ to \ deliver \ materials \ to \ 100+\ undergrads \ with \ Haskell.$
- $\circ \ \ \text{Performed formal verification using type systems with interactive proof assistant } \textbf{Agda}.$

**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]

- o 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 Python and NLTK.

# "Taste" – Mobile App for Finding Restaurants Based on Personal Preference

Oct 2022 - Dec 2022

Mobile Application [github]

- 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.

### **Banking Management Service System**

Apr 2022 – May 2022

Fullstack Web Application

- o Constructed backend that conformed to REST APIs using Node.js, and designed frontend using React.js.
- o Created stored procedures and virtual tables to manipulate data and display stats using MySQL.

### "I Love Mining" – A Puzzle Solver

Mar 2022 – Apr 2022

C++ Multi-Threading [github]

• Implemented ABI Encoding of 256-bit unsigned integers with **Boost**, and mined coins on an Ethereum's smart contract with **C++ multi-threading**.

## 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.
- Presented PM 2.5 forecasts with deviation < 28% by training machine learning models, including regression and time series analysis, with Python and sklearn.
- 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.