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

Skills

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

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

Software: .NET, Docker, Kubernetes, SQL Server, MySQL, 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

**National Cheng Kung University** 

Sep 2015 - June 2020

Bachelor of Science in Computer Science, GPA 3.5

Tainan, Taiwan

o Coursework: Object Oriented Programming, 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.
- $\circ~$  Researched HClib-Actor programs, and documented the usages of its primitive constructs.

Academia Sinica July 2020 – Dec 2020

Research Intern Taipei, Taiwan

- $\circ \ \ Constructed\ context-free\ parser\ using\ Brzozowski's\ derivative\ and\ \textbf{functional}\ \textbf{programming}\ with\ \textbf{Haskell}.$
- $\circ \ \ Programmed \ a \ course \ website \ for \ the \ instructor \ to \ deliver \ materials \ to \ 100+\ undergrads \ with \ Haskell.$
- o 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.
- o 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.
- o Preprocessed text data, and developed book recommender by creating NLP model with Python and NLTK.

### "Finance Hero" – A Simple Budgeting App

June 2018 – July 2018

.NET Framework, Windows Form Application [github]

- Built and designed the app with a minigame inside using **C#** following OOP principles.
- Integrated the app with Microsoft SQL Server database to store user spending and game records.
- Visualized a user's monthly spending by category in pie chart with **ASP.NET** Chart control.

# "Taste" – Mobile App for Finding Restaurants Based on Personal Preference Mobile Application [github]

Oct 2022 – Dec 2022

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.

#### "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]

- 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.