Yi-Chia "Kevin" Chen

Atlanta, GA (530)648-7910 kvnyijia@gmail.com linkedin.com/in/kvnyijia github.com/kvnyijia kvnyijia.github.io

Skills

Programming: Java, JavaScript, TypeScript, Python, Go, C++, C, C#
Certifications: AWS Certified Solutions Architect Associate (EKS, ECR, EC2, RDS)
Software: Docker, Kubernetes, Postgres, MySQL, SQL Server, .NET, Unix/Linux, Git
Fullstack: MongoDB, Express, React, React Native, Node, Flask, REST, HTML, CSS, XML, jQuery, AJAX

Education

Georgia Institute of Technology
Aug 2021 – May 2023
Master of Science in Computer Science, GPA 3.5
Atlanta, GA
- **Coursework:** Machine Learning, Data Analytics, Blockchain, Networks, Info Security, Mobile Applications, Database

National Cheng Kung University
Sep 2015 – June 2020
Bachelor of Science in Computer Science, GPA 3.5
Tainan, Taiwan
- **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**.
- Conducted research on HClib-Actor programs and documented the usage of its primitive constructs.

Academia Sinica
July 2020 – Dec 2020
Research Intern
Taipei, Taiwan
- Constructed context-free parser using Brzozowski's derivative and **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 data import process from Google Sheets to **BigQuery** using **Matillion ETL** and **Python**.
- Proposed new website layouts to improve user experience and ad revenue by analyzing clickthrough rate.

Key Projects

"Simple Bank" – Banking Service System Using Golang
Apr 2023 – May 2023
Backend Web Application, Microservices [github]
- Developed and launched **Go** backend with **REST APIs** using **Gin**, enabling users to manage bank accounts.
- Ensured the proper functionality of APIs and CRUD operations on **Postgres** by implementing unit tests in **Go**.
- Deployed the service to **Kubernetes** clusters on **AWS EKS** and established a production database on **AWS RDS**.

"THE ONE" – Interactive Book Recommendation System
Oct 2021 – Dec 2021
Fullstack Web Application, Machine Learning [github]
- Launched the website that retrieves data from **Flask** backend through **AJAX** requests using **jQuery**.
- Designed an interactive visualization frontend using **D3.js** to display popular books.
- Developed a book recommender system by creating NLP models using **Python**, **sklearn**, **pandas** and **NLTK**.

"Taste" – Mobile App for Finding Restaurants Based on Personal Preference
Oct 2022 – Dec 2022
Mobile Application [github]
- Built and designed the frontend using **React Native**, integrating it seamlessly with the **Flask** backend and **Postgres**.
- Implemented functionality to display nearby recommended restaurants on a map using **Google Map APIs**.

"I Love Mining" – A Puzzle Solver
Mar 2022 – Apr 2022
C++ Multi-Threading [github]
- Implemented ABI encoding of 256-bit unsigned integers using **Boost** and performed coin mining on an Ethereum smart contract using **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**.
- Collaborated in a team to containerize **MongoDB** and **Flask** server with **Docker** for data storage and retrieval. Additionally, collected 4-month meteorological data using sensors paired to **Arduino**.