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, Python, Go, C++, C, C#
Certifications: AWS Certified Solutions Architect Associate (EKS, 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 3.6
Atlanta, GA
- **Coursework:** Mobile Applications, Database, Networks, Info Security, Blockchain, Machine Learning, Data Analytics

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**.
- Researched HClib-Actor programs, and documented the usages 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 process of importing data from Google Sheets to **BigQuery** with **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]
- Launched **Go** backend with **REST APIs** that allows users to manage accounts using **Gin**.
- Ensured the APIs and CRUD operations on **Postgres** function correctly by writing unit tests in **Go** .
- Delopyed the service to **Kubernetes** clusters on **AWS EKS**, and created 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 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 integrated it with **Flask** backend and **Postgres**.
- Displayed nearby recommended restaurants on map with **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 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**.