

# Yi-Chia “Kevin” Chen

📍 Atlanta, GA   📞 (530)648-7910   ✉ [kvnyijia@gmail.com](mailto:kvnyijia@gmail.com)   🔗 [linkedin.com/in/kvnyijia](https://www.linkedin.com/in/kvnyijia)   🐙 [github.com/kvnyijia](https://github.com/kvnyijia)   🏠 [kvnyijia.github.io](https://kvnyijia.github.io)

## SKILLS

**Programming:** C++, C, C#, Verilog, Java, JavaScript, TypeScript, Python, Go  
**Fullstack:** .NET, Flask, Gin, Node, Express, React, Next.js, REST API, GraphQL  
**Cloud/DevOps:** Docker, Kubernetes, Postgres, MySQL, MongoDB, Redis, Git, AWS (EC2, RDS, EKS, SQS, SNS, etc.)  
**Certifications:** AWS Certified Solutions Architect Associate

## 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 (x86 Assembly), Mobile App, Database, Networks (BGP, RPKI, SDN)

**National Cheng Kung University** Sep 2015 – June 2020  
*Bachelor of Science in Computer Science, GPA 3.5* Tainan, Taiwan  
• **Coursework:** Computer Architecture (Verilog), Digital Logic Design (FPGA, Modelsim), Object Oriented Programming, Networks (Socket, TCP/IP, DNS), Operating Systems, Compiler (Lex, Yacc), Data Structures, Algorithms

## WORK EXPERIENCE

**Georgia Institute of Technology** Aug 2022 – Dec 2022  
*Graduate Research Assistant* Atlanta, GA  
• Achieved parallelism in C++ by utilizing the parallel computing model **HClib**.  
• Researched the concurrency model **Actor model** for distributed asynchronous computations.  
• Conducted experiments on HClib-Actor programs and documented the behaviors of their parallel primitives.

**Academia Sinica** Jul 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.

## PROJECTS

**“Mini Reddit” – Lightweight Content Rating System** May 2023 – Jun 2023  
*Fullstack Web Application* [\[github\]](#) [\[github\]](#)  
• Developed a **GraphQL** server using **Apollo Server** and **Express**, integrating it seamlessly with **Redis** and **Postgres**.  
• Designed the **GraphQL** schema and resolvers using **TypeGraphQL** and **TypeScript**.  
• Built a server-side rendered **React** web client in **Next.js**.

**“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 functionality of APIs and CRUD operations on **Postgres** by using **Postman** and writing unit tests in **Go**.  
• Deployed the service to **Kubernetes** clusters on **AWS EKS** and established a production database on **AWS RDS**.

**“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**.

**“THE ONE” – Interactive Book Recommendation System** Oct 2021 – Dec 2021  
*Fullstack Web Application, Machine Learning* [\[github\]](#)  
• Developed a book recommender system by creating NLP models using **Python**, **sklearn**, **pandas** and **NLTK**.  
• Launched the website that retrieves data from **Flask** backend through **AJAX** requests using **jQuery**.

**Air Quality Data Collection, Analysis, and Prediction from Scratch at NCKU** May 2019 – Sep 2019  
*Data Analytics, Machine Learning* [\[github\]](#) [\[github\]](#)  
• 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.