

# KEVIN CHEN (YI-CHIA CHEN)

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## SKILLS

**Languages:** TypeScript, JavaScript, Java, Go, Python, C++, C, C#

**Fullstack:** React, Redux, Next.js, Node, Express, Gin, Flask, Spring Boot, Hibernate, REST API, GraphQL, gRPC

**DevOps:** Docker, Kubernetes, Postman, GitHub Actions CI, JUnit, Linux

**Cloud/DB:** Postgres, MySQL, MongoDB, Redis, AWS (EC2, RDS, EKS) (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, Mobile Applications, Database

**National Cheng Kung University**

Sep 2015 – Jun 2020

Bachelor of Science in Computer Science | GPA 3.5

Tainan, Taiwan

- **Coursework:** Object Oriented Programming, Computer Architecture, Operating Systems, Data Structures, Algorithms

## EXPERIENCE

**AeroTract, LLC**

Sep 2023 – Present

Software Engineer Intern

Albany, OR

- Developed a web app from scratch for fine-tuning machine learning configurations using **TypeScript**, **React** and **Bootstrap**.
- Implemented backend APIs and SDKs using **Python Flask**, and made custom exception classes for error handling.

**Georgia Institute of Technology**

Aug 2022 – Dec 2022

Graduate Research Assistant

Atlanta, GA

- Achieved parallelism in **C++** by using the parallel computing model **HClib** following **Object Oriented** design patterns.
- 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

**"Words" – Flashcard Maker** | *Spring Boot, Hibernate, JUnit, Object Oriented Programming* [\[github\]](#) [\[github\]](#) Sep 2023 – Oct 2023

- Created a **Java Spring Boot** backend following OOP principles, including implementing **REST APIs** to service a **Next.js** web client that turns word definitions into flashcards, and using **JPA** and **Hibernate** to query data from **Postgres**.
- Implemented a secure login service, authentication and authorization using **Bcrypt**, **JWT** and Spring Security Filter.

**"Mini Reddit" – Content Rating System** | *Next.js, React, TypeScript, GraphQL* [\[github\]](#) [\[github\]](#)

May 2023 – Jun 2023

- Developed a **Node Express** server with **Apollo GraphQL** middleware, backed by **Redis** and **Postgres**.
- Designed the **GraphQL** schema and resolvers using **TypeGraphQL** and **TypeScript**.
- Built a server-side rendered **React** web client in **Next.js** and **TypeScript**.

**"Simple Bank" – Banking Service System** | *Golang, AWS, gRPC, Microservices* [\[github\]](#)

Apr 2023 – May 2023

- Built a CI/CD pipeline to automatically run unit tests written in **Golang**, deploy the service to **Kubernetes** clusters on **AWS EKS**, and establish a production database on **AWS RDS**.
- Launched **Golang Gin** backend with **REST APIs** and backed by **Postgres**, and used **PASETO** for authentication.
- Augmented the **Golang** backend with **gRPC** and **gRPC Gateway** using **Protocol Buffers**.

**"Taste" – Restaurant Finder** | *React Native, Mobile Application* [\[github\]](#)

Oct 2022 – Dec 2022

- Built and designed the frontend using **React Native**, integrating it with the **Python Flask** backend and **Postgres**.
- Implemented functionality to display nearby recommended restaurants on a map using **Google Map APIs**.

**"THE ONE" – Book Recommendation System** | *Machine Learning, NLP, Python, D3.js* [\[github\]](#)

Oct 2021 – Dec 2021

- Developed a book recommender system by creating NLP models using **Python**, **sklearn**, **pandas** and **NLTK**.
- Launched a website that gets responses from **Python Flask** backend through **AJAX** requests using **jQuery** and **JavaScript**.
- Designed frontend with interactive visualization using **D3.js** and **JavaScript** to display popular books.