KEVIN CHEN (YI-CHIA CHEN)

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SKILLS

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

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

DevOps: Docker, Kubernetes, Unity, Visual Studio, JUnit, Maven, Postman, GitHub Actions CI, Linux

Cloud/DB: Postgres, SQL Server, 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 \mid 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] 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.

"Finance Hero" – A Simple Budgeting App | C# .NET Application, Object Oriented Programming [github]

Jun 2018 - Jul 2018

- 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.
- "RunRun" Parkour Game | Unity Game Engine, C# Object Oriented Programming [github]

May 2018 – Jun 2018

• Developed a parkour game with user-controlled movement (WSAD), incorporating animations and background music (BGM) using **Unity** and **C**#.