

TE-JUNG CHOU

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EDUCATION

New York University, New York, NY Sep 2020- May 2022
Master of Science in Computer Engineering
Merit Scholarship

Relevant Coursework: Data Structure and Algorithms, Introduction to Java, Machine Learning, Internet Architecture & Protocols

Chang Gung University, Taoyuan, Taiwan Sep 2015- Jun 2019
Bachelor of Science in Electrical and Computer Engineering

Relevant Coursework: Object-Oriented Programming, Mobile Device Programming, Computer Organization, Web Programming

TECHNICAL SKILLS

Coding Language: Python, Java, HTML/CSS, React, JavaScript, GraphQL, C++, C, Swift, R, Scala, SQL, Protobuf
Systems and Tools: AWS Lambda, AWS RDS, PostgreSQL, REST API, Postman, Git, Android Studio, Docker

EXPERIENCE

US Air Supply, Software Engineer, Fremont, CA Sep 2022- Present

- Created pipeline using AWS Lambda (Python, SQL) to efficiently load from third-party APIs into our AWS RDS database, ensuring up-to-date information for our customers.
- Streamlined the booking process, saving each customer over two hours per booking.
- Designed and implemented sophisticated web features using Java, Python, SQL, and protobuf to enhance the customer experience and automate the flight ticket redemption process.
- Built backend features, including user data fetching, credentials verification, backend API definition, and frontend adjustment, using Java, Python, SQL, and protobuf.
- Led a team of 7 individuals to successfully launch a new flight ticket redemption feature, ensuring smooth collaboration and timely project delivery.
- Proactively identified and resolved API violations owned by the backend team, resulting in a 40% increase in codebase robustness and maintainability.

You Shang Technical Corporation, Engineer Intern, Taoyuan, Taiwan Jul 2018- Aug 2018

- Built electrical instruments for measuring the distance of standing long jump and the number of sit-ups using C++.
- Implemented a new infrared sensor on electrical standing long jump instruments for customers.

PROJECTS

Meme Generator, (React.js, HTML, CSS, Sass, JavaScript, API) May 2023- May 2023

- Developed a meme generator website in React.js to generate a random meme where users can type text on the top and bottom of the meme.
- Extracted popular meme sources from an open API to provide a wide variety of meme templates.
- Utilized HTML, CSS, and Sass for responsive and visually appealing user interface design.

Digital Sampler, (Python, scipy, lfilter, pyaudio) Sep 2021- Dec 2021

- Built an audio sampler app in Python using Tkinter and pyaudio to record, process, and playback sound effects in real time.
- Created 11 sound effects including pitch-shifting, time-delaying, and reverberation by implementing complex modulation, bandpass filters, and circular buffers.

Embedded Fitness Detector, (C++, STM32F407) Jan 2021- May 2021

- Developed a software system using C++ that records body movements and identifies 4 different exercises, e.g. sit-ups, from 3-axis accelerometers in a microcontroller board.
- Fine-tuned sensor input by applying a matching movements detection algorithm with 95% accuracy.
- Implement a workout game by showing different LED patterns to designate the movements to the user.

Android Application for basketball stat sheets, (Java) Feb 2020- Jun 2020

- Built an Android application using Java and Android Studio to record real-time stats of basketball games for all players.
- Improved the recording and documenting time of a basketball game's stats by 70%.
- Generated results including field goal percentage, three-point field goal percentage, and free throw percentage for players.
- Designed an algorithm to highlight the players' weaknesses so managers can easily identify points of improvement.