**Nai-Wu Tien (Felix)**

**Portfolio** | <https://www.felixtien.com> & **LinkedIn** | <https://www.linkedin.com/in/felix-tien>

(205)482-3933 | felix.tien.takumu@gmail.com

**EDUCATION**

**University of Alabama at Birmingham** April 2022

Master of Computer Science | GPA: 4.0/3.6

**SKILLS**

● Java ● Python ● C ● Kotlin ● Swift ● HTML5 ● CSS ● JavaScript ● MySQL ● Flask ● Visual Studio Code

● Xcode ● Android Studio ● Algorithms ● Data Structures ● Dynamic Programming ● Parallel Computing

● Android Development ● iOS Development ● Web Full Stack Development

**EXPERIENCES**

**Algorithms Teaching Assistant | UAB CS Department** Jan 2023 – Apr 2023

* Explained the definition of Asymptotic Notations and how to prove them.
* Described in detail every step of Merge Sort, Quick Sort, Heap Sort, etc.
* Illustrated the theory and coding approach of Dynamic Programming, and Data Structure.
* Taught drawing Recursion Tree and using Maters Theorem to calculate recursion run time.

**Java Teaching Assistant | UAB CS Department** Jan 2022 – Apr 2022

* Taught Java basics including an intro to Java’s syntax, variables, data types, operators, etc.
* OOP system design. Explained objects, classes, inheritance, polymorphism.

**Python Teaching Assistant | UAB CS Department** Aug 2021 – Dec 2021

* Taught Python basics including Python’s syntax, variables, data types, operators, etc.
* Illustrated how to use functions, function parameters, and how to get the return values.

**PROJECTS**

**Android Developer | Designed an Android Japanese study app**  Spring 2023 Project

* Utilized Android Studio and wrote XML for UI design and used Kotlin for app logic.
* Employed Retrofit to make a network request.
* Used Room Database to store data in Android.
* Utilized Share Preference to store small data in Android.
* Published Android App to Google Play Console.
* Android Project Link: <https://reurl.cc/WvGGd7>

**iOS Developer | Designed an iOS Japanese study app**  Fall 2022 Project

* Utilized Xcode and wrote SwiftUI for UI design and used Swift for app logic.
* Employed URLRequest to make a network request.
* Used Core Data as the database to store data in iOS.
* Utilized User Default to store small data in iOS.
* Published iOS App to Apple Store Connect.
* iOS Project Link: <https://apps.apple.com/us/app/jlpt-n1-level/id1663524569?l=zh-Hant-TW>

**Web Full Stack Developer | Designed a coding online IDE website**  Summar 2023 Project

* Employed HTML, CSS, and JavaScript to craft the frontend of the website.
* Utilized the Flask framework in conjunction with an SQLAlchemy database for the website's backend.
* Facilitated group collaboration by employing the version control system, GitHub.
* Implemented solutions for LeetCode questions and documented them in a structured JSON format.
* Successfully deployed the website project to a domain acquired through Google Domains.
* Website Link: <https://www.likecode.org>

**Parallel Computing | Job Scheduler**  Fall 2022 Project

* Utilized mutex to prevent concurrency and p\_threads to allow the program to perform multithreaded workloads.
* Implemented queue data structure using linked-list to organize and keep track of jobs.

**LANGUAGES SKILLS**

● Mandarin (native) ● English (fluent) ● Japanese (fluent) ● Taiwanese (native)