Chia Hao Hsu Tai (David)

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EDUCATION

Northeastern University   **Boston, MA**
- Candidate for a Bachelor of Science in Computer Science and Mathematics.   Sept. 2020 – Present
- Candidate for a Minor in Industrial Engineering.   GPA – 3.98/4.00
- Relevant Coursework: Object Oriented Design, Database Design, Discrete Structures, Matrix Methods for ML, Artificial Intelligence, Logic and Computation, Fundamentals of Computer Science.
- Honors: Dean's List (all semesters since admission).

EXPERIENCE

John Hancock/Manulife III Investment Management   **Boston, MA**
Data Science and Advance Analytics Intern   Jul. 2022 – Dec. 2022
- Automated the data extraction pipeline for several web-based resources resulting in an 83% increase in efficiency and possible reductions in company costs.
- Created a flexible data extraction tool to optimize the data retrieval process for several marketing materials allowing the analytics team to accelerate the production of the new marketing database.
- Redesigned and optimized a series of SQL queries leading to a 39% reduction of computer processing time.
- Facilitated the maintenance of an existing data pipeline by creating an internal web application documenting all the data processing steps used to clean and extract the data.

PROJECTS

Animator – Java   Mar. – May 2022
- Utilized the MVC design pattern to create a motion picture application that reads and displays animations submitted by a user.
- Constructed a graphical user interface allowing the user to interact with any running animation.
- Simplified the addition of new features to the existing application by implementing a visitor design pattern.

European Soccer – SQL, Java   Oct. – Nov. 2021
- Constructed a relational database that stores data for different European soccer leagues, players, matches and coaches.
- Simplified the maintenance and update process of the database by introducing a series of automated triggers.
- Developed a front-end Java application allowing users to view and manage the database based on the user's credentials.
- Introduced application side data validation steps to limit database error handling and data inconsistencies.

TodoList – HTML, CSS, JavaScript   Dec. – Dec. 2022
- Built a web-based to-do application with the ability to add, edit, delete, and track tasks.
- Enabled the incorporation or re-implementation of code by using the MVC design pattern.
- Designed and styled every visual component in the user interface using CSS properties.

BridgeIt – Java   Nov. – Dec. 2021
- Designed a 2-player game where players compete to connect opposing ends of a canvas.
- Created a responsive user graphical user interface which accepted and displayed player inputs to the game.
- Implemented a cyclical data structure to facilitate the design of a path finding algorithm.

LEADERSHIP

NEU Culture and Language Learning Society   **Boston, MA**
Advanced Spanish Language Ambassador   Sept. – Dec. 2021
- Co-hosted guided advanced Spanish language learning session for Northeastern students.
- Produced a flexible weekly learning schedule to target specific learning goals and topics.
- Encouraged an active learning environment by creating a series of interactive learning challenges and exercises.

SKILLS & INTEREST

Technical: Python, Java, SQL, HTML, CSS, JavaScript.
Spoken Languages: Spanish (native), English (fluent), Chinese (beginner).
Interest: Soccer, Reading, Olympic Weightlifting, Volleyball, Music, Programming.