Yu-Heng Daniel Lin

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github website linkedin

EDUCATION

Pasadena City College   **Pasadena, CA, USA**

A.S Electrical and Computer Engineering. GPA: 4.0   *Nov 2021 - Present*

SKILLS

Technical Skills

- Languages: Python, C++, SQL, Golang, JavaScript, HTML, CSS, Java
- Technologies: Git, Linux, MongoDB, MySQL, SQLite, PostgreSQL, GTest.
- Frameworks: Django, React.js, Bootstrap CSS, C++ SFML, Golang Cobra.

EXPERIENCE

CCHCLA   **San Gabriel, CA**

Web Admin   *Dec 2021 - Mar 2022*

- Managed and enhanced a high-traffic website
- Revitalized frontend experience through Bootstrap integration
- Employed internal tools for data backup and preservation

EduBoost website   **Arcadia, CA**

Web Developer/Content Creator   *Mar 2023 - Present*

- Led and built a **Python Django** based learning platform, encompassing video course integration and live coding assessment
- Implemented text-based tutorials to enhance learning diversity.
- Developed an interactive online judge system for coding practice, fostering real-time coding evaluations.
- Maintained and updated website content for accuracy and relevance.

PROJECTS

Simple KV Storage (A Key Value Storage Engine)

- A High-Performance Key Value Paired Storage in **C++** using the logged base storage model.
- Designed user-friendly and easy to integrate APIs.
- Supported Template Input Data Type for both Keys and Values.

Little Cloud (A Cloud Storage + File Sharing System)

- Built using **Django, Bootstrap, HTML, and SQLite**.
- Supported authentication, user registration, file uploading, and file sharing functionalities.

Little Test Framework (A Light Weight C++ Testing Framework)

- Utilize C++ OOP design principles and **C++** macros for test discovery, organization and execution.
- Packaged the project into an easy to integrate CMake Library.
- Implemented intuitive and useful features such as timing, test-skipping, and execution reporting.

SQL (A Relational Database System)

- A **C++** implementation of relational database including a SQL like query language.
- Supported common SQL syntax like select, insert, and create.
- Capable of perform complex SQL select queries in short time.
- Supported persistent storage implemented using binary file IOs.
- Supported prefix selection query using Trie data structure.

LVCS (A Version Control System)

- A **Golang Cobra** based CLI version control system designed to simplify code managements.
- Utilizes Sha1 hashing algorithm for efficient file content storing.
- Allows efficient track, stage, and commit changes, navigate branches, visualize commit history, and restore snapshots of commits.