Kenny Thai

Education

University of California, Riverside

Riverside, California

Bachelor of Science in Computer Science; GPA: 3.94

September 2021 - June 2025

Relevant Coursework: Data Structures & Algorithms, Frontend Development, Database Management Systems, Artificial Intelligence, Embedded Systems, Compiler Design, Software Construction, Computer Architecture

Technical Skills

Languages: Python, C++, PHP, JavaScript, C, Lua, HTML, CSS

Developer Tools: Git, React, Node.js, MongoDB, Bootstrap, PostgreSQL, jQuery, Microsoft SQL Server, Docker,

Podman, GoogleTest, GDB, CMake, Pandas, PyTest

Experience

Orange County Control District

 $Full\ Stack\ Development\ Intern$

June 2024 - September 2024

- Developed a portal for HR to organize evaluations submitted by managers regarding employee work ethic, punctuality, and other performance metrics.
- Implemented Microsoft OAuth for user authentication and session management, enabling 8+ role-specific views for a tailored user experience.
- Designed a relational database in **Microsoft SQL Server** with **15+** relations and **40+** entities, facilitating optimized data access and improved query performance.
- Employed an **Apache** server to improve **JSON** data management, allowing smooth data exchange for **20+ RESTful APIs** during development.

UCR Computer Science and Engineering Department

github.com/ucrcsedept

Software Development Intern

June 2023 - June 2024

- Implemented **Podman** containers across **85**+ courses, enabling efficient setup and replication of coding environments.
- Formed a test question database on **GitHub**, integrating it with the **PrairieLearn API** to present questions for student assessments conducted on the PrairieLearn test-taking platform.
- Reduced Dockerfile layers by 30% and decreased memory utilization by minimizing unnecessary package installations.
- Implemented a dynamic question generation system for classes by leveraging **JSON** for metadata, **HTML** for structured question templates, and **Python** for data generation.
- Revamped the auto-grading system with **Python**, resulting in an average **12**% increase in students' partial credit, enhancing overall assessment accuracy and feedback loop.

Projects

Nommies | MongoDB, Express, React, Node.js

github.com/kennythai2003/Nommies

- Developed a social media platform enabling users to share restaurant experiences, create profiles, post reviews, follow others, and discover new places to eat.
- Created 15+ dynamic, reusable components in **React** using **hooks** and **JSX**, improving code maintainability.
- Leveraged MongoDB for efficient and scalable data storage, enabling robust CRUD operations for managing a class of 50+ user records and application content.
- Built a **RESTful API** with **Node.js** and **Express** to manage server-side logic, implementing **20**+ functions for data fetching, updating, and deletion operations.

PlanIt | C++, Git, OOP, $Unit\ Testing$

github.com/kennythai2003/PlanIt

- Designed an advanced task scheduler in C++, featuring an interface for task creation, deletion, editing, and searching.
- Leveraged advanced **object-oriented design** principles, incorporating abstraction, encapsulation, and polymorphism, to architect a highly modular and scalable product.
- Implemented CI/CD processes with Git, automating builds, deployment pipelines, and testing stages for an efficient end-to-end development workflow.
- Utilized GDB and Valgrind for diagnosis of test failures allowing for easy troubleshooting.
- Wrote and automated 80+ unit tests employing the GoogleTest framework to increase code coverage ensuring the robustness and reliability of the application.