David Chan

EDUCATION

University of California, Irvine

GPA: 3.84, Dean's Honor List

- Relevant Coursework: Project in Software System Design, Introduction to Software Engineering, Design and Analysis of Algorithms, User Interaction Software, Human-Computer Interaction

Contra Costa College

GPA: 4.0

- Relevant Coursework: Advanced Programming with C++, Assembly Language & Computer Organization, Object Oriented Programming in C++, Data Structures, Linear Algebra

SKILLS AND INTERESTS

- **Skills:** C/C++, JavaScript, Python, Java, HTML/CSS, SQL, C#
- Tools and Frameworks: NodeJS, ExpressJS, ReactJS, NextJS, Flask, Unity Engine, Bootstrap, Jest
- **Educational Interests**: Web Development, Backend Development, Process Automation, Web Data Extraction, Game Development and Design, Machine Learning, Information Systems

RELEVANT EXPERIENCE

Software Engineer Intern on Trust & Safety | DOAH.ai

August 2024 - December 2024

- Developed RESTful API endpoints using NodeJS, expanding on client interactions with internal APIs for enhanced user and data management
- Built and optimized tools for user enrichment workflows, including email lookups to aggregate and unify user information retrieved from various internal APIs
- Specialized in detecting and flagging user data as spam by improving automated spam detection
- Increased unit testing coverage for internal APIs to ensure robust data handling using Jest.

Backend Developer: Ride Planner App | IrvineHacks

January 2025

- Developed and implemented RESTful internal APIs using Flask to handle event creation, editing, ride coordination, and database interactions with PostgreSQL
- Designed a min-heap based auto-assignment algorithm to optimize rider to driver mapping to minimize total travel distance and time between users
- Integrated geocoding APIs for address validation and coordinate retrieval to compute distances while handling real-time event updates with Flask-SocketIO
- Collaborated with teammates to troubleshoot and resolve issues under strict time constraints

DicomViewer 3D | Project in Software System Design

March 2024 - June 2024

- Designed and developed a browser-based application using NodeJS, ExpressJS, and ReactJS for 3D medical scan visualization for a client
- Implemented backend services to handle DICOM file uploads, utilizing 3D Slicer's API for model generation, and leveraging three.js for model rendering
- Integrated zip extraction, UUID generation, and file handling functions

Fishy Game (Unity)

June 2023

- Developed a 2D game in Unity using C# to gain familiarity with Unity Engine
- Designed a progression system where the player grows by consuming smaller fish
- Implemented basic controls, game state management, and audio using Unity's built-in components and systems (Rigidbody2D, Collision, SceneManagement, AudioSource)

ORGANIZATIONS

Alpha Epsilon Pi

November 2023 - Present

- Head of New Member Development (Spring 2024)

WORK EXPERIENCE

Target

July 2021 - August 2023

- Worked cohesively with a team to manage online orders, processing over 400 items daily
- Developed strong communication skills to efficiently complete tasks and handle various requests

DAVID CHAN