Connor Auyong

909-217-9926 | connorauyong@gmail.com | linkedin.com/in/connorauyong | github.com/con169

EDUCATION

University of California, Irvine

Irvine, CA

Bachelor of Science in Computer Science and Engineering

Expected 2026

• Major GPA: 3.6

• Relevant Coursework: Data Structures and Algorithms, Digital Systems, Embedded Software, Differential Equations, Computer Organization, Operating Systems, Database Management, Design & Analysis of Algorithms, Intro to AI

Experience

Incoming Research Intern

 $June\ 2025-August\ 2025$

NIWC Pacific

San Diego, CA

STEM Center Tutor

August 2023 – January 2024

Mount San Antonio College

Walnut, CA

- Helped five dedicated students three times a week with the foundations of Computer Science that emphasized strong foundations and good code formatting techniques.
- Guided students through debugging strategies and project-based learning, improving problem-solving abilities.

Projects

Smart Textbook | TypeScript, React, Python, Flask, ElevenLabs/OpenAI API

April 2025 – Present

- Architected an intelligent PDF reader leveraging GPT-4 for dynamic text summarization and Q&A, implementing efficient context windowing and prompt engineering to reduce token consumption by 40%.
- Developed a real-time text-to-speech system with synchronized text highlighting, integrating ElevenLabs API for natural voice synthesis and achieving 98% text-audio alignment accuracy.
- Built a scalable Flask backend handling concurrent PDF processing and LLM interactions, with robust error handling and rate limiting, supporting documents up to 100MB with sub-second responses.

TaskIt | JavaScript, React, Node.js, Express, MongoDB, HTML, CSS

Sep 2024 – Present

- Developed a RESTful API that facilitated smooth client-server communication, resulting in reduction in load time for dynamic content.
- Enhanced user experience by implementing React for dynamic UI rendering, improving user engagement through real-time updates and state management.
- Designed and optimized database schemas in MongoDB for efficient data retrieval.

Embedded Software | C, ATMega32, Atmel-ICE

April 2024 – June 2024

- Designed and implemented firmware for embedded systems, optimizing performance and enabling real-time interactions with LCD, keypad, and speaker components.
- Designed and implemented an alarm clock with keypad, LCD, and speaker integration.
- Created an innovative 2D side-scrolling game, integrating LCD, keypad, and speaker components. The game increased user interaction through dynamic obstacles and real-time sound effects.

PDF Listen App | SwiftUI, Core Data, PDFKit, AVFoundation

Nov 2024 – Present

- Designed and implemented an iOS application using SwiftUI, enabling users to import, view, and listen to PDF content with seamless integration of PDFKit and AVFoundation for text-to-speech functionality.
- Leveraged Core Data for persistent data storage, enabling users to store and manage imported PDF documents across sessions, integrating directly with SwiftUI's environment.

EXTRACURRICULARS

Healthcare Cost Analysis | Data Club at UCI

Jan 2025 - Mar 2025

- Uncovered hidden cost imbalances in HMO plans by applying multi-stage anomaly detection, revealing disproportionate Rx expenses for Non-SNP members.
- Identified 4,800 initial outliers using Interquartile Range (IQR) filtering, then refined detection with Local Outlier Factor (LOF) and Isolation Forest to isolate 500 high-confidence anomalies, improving interpretability and decision-making.

TECHNICAL SKILLS

Certifications: AWS Certified Cloud Practitioner (Aug 2024 - Aug 2027)

Languages: C++, C, LaTeX, Swift, HTML/CSS/JavaScript, Java, Python, Verilog, R, MySQL, Lisp, ProLog

Developer Tools: Linux, Git, Docker Libraries: pandas, NumPy, Matplotlib, Seaborn, Scikit-Learn