# JAN KWONG

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**EDUCATION** 

UC San Diego La Jolla, CA Sep 2021 – Present

**Anticipated Graduation Date:** Jun 2026

Major: Computer Science Minor: Cognitive Science

**GPA:** 3.8

Courses: Advanced Data Structures, Design and Analysis of Algorithms, Operating Systems, Software Engineering, Data

Science in Practice, Computer Architecture, Theory of Computation, Computer Vision, Modern Cryptography

#### **EXPERIENCE**

UC San Diego La Jolla, CA Apr 2024 – Dec 2024

Computer Science Tutor

• Provided clarification and support to students enrolled in the "Theory of Computation" course during office hours

- Evaluated students' homework assignments and exams, offering detailed feedback to aid their understanding
- Participated in weekly staff meetings with the teaching team to discuss course progress and address challenges

# **UC San Diego LASR Lab**

La Jolla, CA

Jan 2024 – Dec 2024

Undergraduate Research Assistant

- Co-author on a research project on the Acoustical Society of America focused on forced aligners and neural networks for phonetic recognition
- Conducted comprehensive literature reviews on automatic speech recognition models, such as Whisper by OpenAI and Wav2vec by Meta
- Implemented programs to compute word error rates for speech recognition outputs generated by Whisper

#### **UC San Diego**

La Jolla, CA

**Sep 2023 – Dec 2023** 

**Instructional Apprentice** 

- Assisted teaching assistants in hosting studio sessions for the "The Design of Everyday Things" course
- Evaluated student projects, providing constructive feedback to support their learning objectives
- Attended weekly meetings with the teaching team to assess course progress and identify areas for improvement

#### **PROJECTS**

#### **Analysis of Pixar Movie Success**

La Jolla, CA

**Sep 2024 – Dec 2024** 

- Collaborated with a team of 4 members to analyze the influence of character types on Pixar movies revenue
- Performed data cleaning and exploratory data analysis to gain insights into the data of 28 Pixar movies
- Concluded the absence of a correlation between character types and box office using permutation testing

# **Streak-Based Developer Journal**

La Jolla, CA

Apr 2024 – Jun 2024

- Collaborated with a team of 11 members through Agile practices, participating in daily stand-ups, sprint planning, and conducting retrospectives to ensure smooth and efficient project progress
- Developed the tagging feature using JavaScript, allowing users to organize journal entries effectively
- Contributed to end-to-end Puppeteer testing, improving the reliability and robustness of the application

# **Evaluation of Speech Recognition AI**

La Jolla, CA

Jan 2024 – Jun 2024

- Evaluated the performance of OpenAI's Whisper against 75 human transcribers on a dataset of 300 English sentences spoken by 20 speakers with varying accents
- Discovered that sentence context differentially affected model and human performance
- Observed that humans outperformed models on isolated words, suggesting potential limitations in models' training data or acoustic context requirements
- Identified potential applications for using ASR to model human speech adaptability

### **SKILLS**

- Python, Java, C, C++, JavaScript, HTML, CSS, ARM, SystemVerilog, Data Structures, and Algorithms
- Native/bilingual proficiency for Cantonese, English, and Mandarin; intermediate in Japanese