

Adrian Wong

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EDUCATION

University of California, San Diego

B.S. in Mathematics-Computer Science

Expected Jun 2025

San Diego, CA

Relevant coursework: Advanced Data Structures, Advanced Algorithms, Object-oriented Programming, Big Data Analytics, Computer Systems, Software Labs and Tools, Graph Theory, Linear Algebra

PROJECTS

Super Bowl Data Analysis

Apr 2024 – Jun 2024

Python, Pandas, NumPy, Matplotlib, Seaborn, Jupyter Notebook

San Diego, CA

- Performed comprehensive exploratory data analysis (EDA) on 100,000+ rows of Super Bowl Halftime Show data, revealing minimal correlation between the popularity of performers and advertiser stock prices
- Developed linear regression models with Python to analyze correlations between artist popularity, ad exposure, and financial performance of advertising companies before and after the show, achieving 90% accuracy in stock price predictions
- Utilized Python libraries like Pandas, NumPy, Seaborn, and Matplotlib to isolate key variables and provide statistical visualization against show popularity, improving data accuracy and analysis efficiency by 80%
- Led collaboration for a team of 5 using an agile workflow, distributing tasks such as data gathering, hypothesis formulation, analysis, and revisions to ensure timely delivery

PantryPal

Sept 2023 – Dec 2023

Java, MongoDB

San Diego, CA

- Developed a full-stack JavaFX GUI application with a MongoDB backend, integrated with ChatGPT and Whisper APIs to generate food recipes from transcribed audio input, enabling hands-free meal planning
- Wrote 100+ unit and integration tests, resulting in catching and fixing of 40+ bugs prior to production, significantly improving application stability and performance
- Enhanced DALL-E food image generation accuracy by 85% by incorporating KeyBERT for keyword extraction, leading to more relevant and visually accurate results
- Led Agile Development team of 5 by managing daily stand-ups, conflict resolution, and task tracking using GitHub Actions and Projects to meet project milestone deadlines successfully

EXPERIENCE

CodePath Cybersecurity Student

Apr 2022 – Jun 2022

Linux, John the Ripper, Metasploit, Bash

San Diego, CA

- Analyzed system vulnerabilities by deploying custom payloads on exploited ports of a Linux virtual machine, identifying 4 critical security weaknesses
- Cracked 1000+ leaked passwords by manipulating John the Ripper rulesets, enhancing discovery speed by 25%
- Detected and mitigated multiple trojan horses by cross-referencing IP addresses against the National Vulnerability Database, reducing potential system compromise by 30%

Math-Computer Science Tutor

Mar 2022 – Jun 2022

Java

San Diego, CA

- Identified students' learning challenges and designed personalized lesson plans to address their problem areas, increasing students' average test scores by 10%
- Tutored 3 students twice a week, 60 minutes per session on data structures, algorithms, and vector calculus
- Recommended study and time management strategies to effectively organize workload and prepare for exams, raising students' grades from a C's to B+'s

TECHNICAL SKILLS

Languages: Python, Java, C++, C, HTML, CSS, JavaScript, Bash

Frameworks: MongoDB, Git, JUnit, Pandas, NumPy, Seaborn, Matplotlib, Jupyter Notebook

Tools/Workflow: Unix/Linux, GitHub