

Jayden Jardine

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EDUCATION

University of California, Santa Barbara

B.S. in Computer Science

GPA: 4.0/4.0 ~ Engineering Honors Program

Course Work: Advanced Applications Programing, Data Structures and Algorithms, Probability and Statistics

Santa Barbara, CA

2024 - 2026 (Expected)

Ohlone College

A.S. in Computer Science

GPA: 3.895/4.0 | President of Ohlone Blockchain | Student Health Advisory Committee Board Member

Course Work: C++ (Intro-Advanced), Data Structures and Algorithms (C++), Assembly Language, Discrete math, Linear Algebra, Mechanics, Electricity and Magnetism, Optics/Heat/Modern Physics

Fremont, CA

2021 - 2024

INTERNSHIP

Santa Clara University, Frugal Innovation Hub

Software Engineer Intern | App development • Flutter • Dart • Figma

Santa Clara, CA

June 2022 - August 2022

- Designed and developed a **multi-platform application** to aid refugees in acclimating to their new environment.
- Centralized relevant information and resources into the app for location-based support
- Prototyped app in **Figma**, Coded in **Dart/Flutter**, Leveraged open source APIs
- Maintained code development and version control with **Git**/Github
- Improved communication processes in the workspace as well as enhanced collaborative skills

RESEARCH

Computer Architecture Lab (UCSB)

Undergraduate Researcher | AI/ML • Python • Tensorflow

Santa Barbara, CA

2024 - Current

- Project Focus: Enhancing energy efficiency in **AI through neuro-inspired temporal arithmetic**. Learn more at <https://www.arch.cs.ucsb.edu/neuromorphic>
- Responsibilities: Implement advanced neural networks (including YOLO) and assess the impact of temporal arithmetic on AI performance.
- Outcome: Aim to visualize and quantify the advancements in AI efficiency due to innovative computational methods.
- Current Stage: Working to understand the background and technical functions of **Temporal Arithmetic** and **Race Logic**.

PROJECTS

Speech to Text Implementation [Python • PyTorch • Hugging Face • Audio Processing]

- Integrated OpenAI's Whisper model using the transformers library for efficient speech-to-text conversion, supporting both CPU and GPU environments.
- Implemented audio recording, **noise reduction**, format conversion, and file management functionalities to enhance input quality for accurate speech recognition.
- Designed and developed an AudioDataAnalysis class to enable user-driven analysis, visualization, and manipulation of audio data through a comprehensive interface.

Sustainability project [C++ • Algorithm Design • Project Management • Optimization]

- Developed an algorithmic solution for route optimization to enhance service efficiency for a mobile food bank, focusing on maximizing outreach and fuel efficiency.
- Led the project team, organizing tasks and responsibilities to align with individual skills and project requirements.

Ethereum Lottery Smart Contract [Solidity • Ethereum • Web3.js • Smart Contract Development]

- Developed a fully interactive Blackjack game using HTML, CSS, **JavaScript**, and jQuery, integrating external APIs to simulate real-time gaming scenarios.
- Focused on enhancing understanding and implementation of AJAX requests and JSON data manipulation, creating a dynamic user gaming experience.

Skills

Languages: C++, Python, Flutter/Dart, Javascript, Solidity,

Technologies: CSS, JQuery, HTML, Excel, Node.js

Interests: AI/ML, Snowboarding, Weightlifting