


# WYATT AVILLA

[github.com/wyatt-avilla](https://github.com/wyatt-avilla) 

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## EDUCATION

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**University of California, Santa Cruz**

*September 2021 - Present*

*Major:* B.S. Cognitive Science, specializing in AI & HCI

**CGPA: 3.9**

*Minor:* Computer Science

## TECHNICAL STRENGTHS

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**Programming Languages**

C/C++, Python (Pandas, NumPy), Rust, Bash, Lua

**Software & Tools**

Git, Linux, GitHub Actions, CI/CD, WebAssembly, Docker, AWS

## WORK EXPERIENCE

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**Data Structures & Algorithms Tutor**

*July 2024 - September 2024*

*University of California, Santa Cruz*

- Assisted students in understanding core concepts of data structures and algorithms.
- Led and conducted group sessions to facilitate collaborative learning and peer discussions.
- Developed supplemental materials to enhance students' learning experiences.
- Helped students prepare for exams by reviewing key topics and solving practice problems.

## RELEVANT COURSES

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**Core Courses**

Data Structures & Algorithms

Object Oriented Programming

Parallel Programming

Computer Systems

**Other Courses**

Discrete Mathematics

Linear Algebra

Vector Calculus

## PROJECTS

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**PowerPC Assembly Reverse Engineering** 

*March 2024*

Contributed to an open-source reverse engineering project for Super Smash Bros. Melee on the Nintendo GameCube. Focused on analyzing PowerPC assembly code and translating it into C. Actively collaborated with a team of developers to improve accuracy and functionality, contributing to a collective effort to document and recover the game's codebase.

**Rust-Based Website** 

*June 2024*

Developed a fully Rust-based website leveraging WebAssembly and Trunk for building, hosted on shuttle.rs. Utilized Rust's procedural macros to dynamically generate HTML and CSS, ensuring a strongly-typed, efficient development process without relying on traditional frontend languages.

**Discord Bot** 

*March 2023*

Developed a Discord bot utilizing the TikTok text-to-speech API to enable real-time text-to-speech requests within voice channels. The bot allows users to submit text messages which are then converted to speech and played back live during voice calls.