Will Ruff

425.615.0778 • wruff9150@sdsu.edu

Education

San Diego State University, Department of Computer Science

Bachelor of Science in Computer Science

Cumulative GPA: 3.83

Expected Graduation: May 2026

Relevant Coursework: Computer Architecture • Data Structures • Intro to Software Systems • Computer

Organization • Calculus I/II • Discrete Mathematics • Linear Algebra • Principles of Physics

Projects

Image Processing on MIPS

November 2023 – December 2023

- Independently developed a program to manipulate and transform various images over three weeks.
- Developed advanced image thresholding techniques for enhanced visual clarity and function.
- Implemented dynamic and customizable image transformations: rotation, scaling, and skewing.
- Employed cryptographic encryption by implementing an algorithm to scramble various pixels.

Spam Detection AI Model

September 2023 – December 2023

- Collaborated with a team of 5 individuals to develop an AI Model to detect spam messages.
- Implemented a training set comprised of over 10,000 messages to train our model using Python.
- Preprocessed the raw dataset and implemented an algorithm based on Naive Bayes Classification.
- Achieved 98% accuracy in detecting spam messages through rigorous debugging and testing.
- Created an engaging slide deck and presented the final project to the Artificial Intelligence Club.

Work Experience

Glympse Seattle, Wa

Location Sharing Technology

Title?

June 2024 – August 2024

- Developed Python and Golang scripts to compare files, optimizing memory via benchmarking.
- Migrated legacy code to a new repository, adding parameters and enhancing report functionality.
- Refactored and modernized a shell script report to Python, improving readability and maintainability.
- Developed and implemented unit tests to ensure the reliability and accuracy of the Python code.
- Deployed code using GitLab pipelines, configuring environments with 'gitlab-ci.yml' and Docker.

San Diego State University

San Diego, California

Academic Institution

Student Research Assistant

February 2024 – June 2024

- Conducted research under faculty in the Integrating Cyber Innovations with Physical World Lab.
- Investigated medical device recalls to detect underlying problems related to software issues.
- Implemented code to automate data extraction from the FDA recall website for relevant analysis.
- Engaged in problem-solving exercises to address research challenges and advance project objectives.
- Utilized HTML to design a compelling and operational website that proficiently showcases research.

Treobytes

San Diego, California

STEM Education Program

Facilitator

March 2024 – May 2024

- Developed and customized STEM lesson plans to suit the interests of diverse student groups.
- Facilitated educational sessions for students, delivering course content effectively and engagingly.
- Conducted meticulous quality assessments on STEM resources for accuracy and functionality.
- Demonstrated strong organizational and time management skills to balance multiple responsibilities.

Additional Information

Honors: Dean's List (3/4 Semesters), High School Valedictorian & Faculty Selected Master of Ceremonies (June '22), 1st Place DECA International Career Development (Business Law & Ethics Roleplay)(May '21) **Skills:** Java, C++, HTML5, Computer Architecture, Object Oriented Programming, Data Analytics, GitLab **Interests:** Entrepreneurship, Lifting Weights, Pickleball, Basketball, Cooking, Chess, Camping, Running