Will Ruff

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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: Advanced Programming Languages • Operating Systems • Computer Architecture • Data Structures • Intro to Software Systems • Computer Organization • Discrete Mathematics • Linear Algebra
Skills: Python, Java, C++, GoLang, HTML5, JavaScript, CSS, GitLab CI/CD, Docker, Data Preprocessing, Shell Scripting, Object-Oriented Programming, Algorithm Design and Analysis, Version Control (Git), API Integration, Computer Architecture, Debugging and Testing, Data Analytics, Software Development Lifecycle (SDLC)

Work Experience

Glympse Seattle, Washington
Location Sharing Technology
Software Engineering Intern June 2024 – Present
- Developed Python and Golang scripts for file comparison, cutting memory usage by 25% via benchmarking.
- Migrated legacy code to a new repository, adding essential parameters and enhancing report functionality.
- Refactored and modernized a shell script report in Python, enhancing readability and maintainability.
- Built and implemented comprehensive unit tests to ensure the reliability and accuracy of the Python code.
- Deployed code using GitLab CI/CD 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 extensive research under faculty in the Integrating Cyber Innovations with Physical World Lab.
- Investigated detailed medical device recalls to detect underlying problems related to software issues.
- Implemented efficient code to automate data extraction from the FDA recall website for relevant analysis.
- Engaged in collaborative problem-solving exercises to address research challenges and advance objectives.
- Utilized HTML5 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 innovative STEM lesson plans to suit the interests of diverse student groups.
- Facilitated intriguing educational sessions for students, delivering course content effectively and engagingly.
- Conducted meticulous and thorough quality assessments on STEM resources for accuracy and functionality.
- Demonstrated exceptional organizational and time management skills to balance multiple responsibilities.
- Assisted in the development of a coding course where students learned by creating their own video game.

Projects

Image Processing on MIPS November 2023 – December 2023
- Independently developed a program to efficiently manipulate and dynamically transform various images.
- Developed advanced image thresholding techniques for enhanced visual clarity and precise function.
- Implemented dynamic and customizable image transformations, including rotation, scaling, and skewing.
- Employed cryptographic encryption by implementing a robust algorithm that scrambles various pixels.
- Tested and debugged image transformation algorithms to ensure accuracy and reliability across image sets.

Spam Detection AI Model September 2023 – December 2023
- Collaborated with a team of five individuals to develop an AI Model designed to detect spam messages.
- Implemented a training set comprised of over 10,000 messages to effectively train our model using Python.
- Preprocessed the dataset thoroughly and implemented an algorithm based on Naive Bayes Classification.
- Achieved a remarkable 98% accuracy in detecting spam messages through rigorous debugging and testing.
- Created an engaging slide deck and confidently presented the final project to the Artificial Intelligence Club.

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)
Organizations: Artificial Intelligence Club, ELeet Code Club, Undergraduate Student Research, Pickleball Club
Interests: Entrepreneurship, Lifting Weights, Pickleball, Basketball, Cooking, Chess, Camping, Running