Marina W. Rosenwald

marinarosenwald@gmail.com • linkedin.com/in/marina-rosenwald • https://marinarosenwald.com

Summary

Artificial Intelligence	Differential Equations	Computer Vision
Machine Learning	Calculus & Statistics	Java, Python, C, C++, JavaScript
Operating Systems	Physics	SQL, Swift, Rust, CSS
Data Structures	Software Engineering	Assembly x86, Binary
Algorithms	Application Development	Linux, Windows, MacOS
Databases	Website Development	Research
Linear Algebra	Cyber Security	Team Lead, Project Management

Education

Bachelor of Science, Computer Science, California Polytechnic State University, SLO   **March 2023**
　　　Senior Thesis*, Object Detection and Size Estimation Using LiDAR in Application Development*
General Diploma, Sammamish High School, Bellevue, WA   **June 2020**

Experience

Application Developer (iOS)　Self   **September 2022 - Present**
- Designed and developed an innovative iOS application incorporating advanced features such as iPhone Pro LiDAR measurements, focal length, and pixels.
- Created an original mathematical formula that utilizes the Thin Lens Theorem, Image Plate Scale, and geometry to accurately estimate the size of objects within the application.
- Implemented a user-friendly interface, ensuring seamless user interaction and enhanced user experience.
- Integrated photo and video storage and access functionality within the application.
- Authored academic papers currently undergoing peer review for potential publication.

Lead Student Research Assistant　California Polytechnic State University, SLO, CA   **Fall 2021 – April 2023**
- Led a team of over 30 cross-disciplinary student researchers as the student team lead for a machine learning project that utilized drones to collect data on marine and agricultural life.
- Participated in budget meetings, conducted team meetings, and coordinated projects and materials to ensure smooth project execution.
- Designed and developed an iOS and Android application using Kivy, which successfully connected YOLOv5 to the drone's live video feed.
- Implemented a robust user interface, camera input functionality, and data storage capabilities within the application.
- Developed multiple deep learning models to accurately identify animals in the collected data.
- Designed and developed a comprehensive team website with a file system backend using JavaScript, React, and MongoDB.
- Acquired necessary permits and licenses as the trained Drone Pilot, ensuring compliance with regulations.
- Represented the project in marketing media and effectively performed public relations tasks, including news interviews, community outreach events, and maintaining communication with sponsors.

Instructional Student Assistant　California Polytechnic State University, SLO, CA   **September 2022 – April 2023**
- Provided valuable support as an Instructional Student Assistant for undergraduate and postgraduate level courses in Artificial Intelligence and User-Centered Interface Design and Development.
- Created comprehensive lab materials to enhance students' understanding and practical application of course concepts.
- Assessed and graded student assignments, ensuring fairness and accuracy in evaluation.
- Guided and assisted students throughout course-long programming projects, offering technical expertise and guidance to help them achieve their project goals.
- Collaborated closely with students during lab sessions, addressing questions, providing explanations, and offering hands-on support.

- Maintained a positive and engaging learning environment, encouraging active student participation and fostering a strong understanding of the subject matter.

Software Engineer Range Generation Next, Vandenberg Space Force Base, CA   **December 2022 – April 2023**
- Conducted cyber security scans and implemented relevant Security Technical Implementation Guides (STIGs) to ensure system security.
- Configured Cisco Switches to establish appropriate network connections, optimizing network performance. Installed and debugged operating systems on specialized computers, ensuring smooth operation and compatibility.
- Configured and operated Virtual Machines, effectively managing virtualized environments.
- Established and maintained VMWare servers, ensuring reliable and efficient server operations.
- Collaborated closely with cross-functional teams including Software Engineering, Cyber Security, and Hardware Engineering departments on large-scale projects.
- Successfully acquired interim security clearance, demonstrating trustworthiness and adherence to security protocols.

Intern DiamondStream Partners, Seattle, WA (remote)   **Summer 2020 & 2021**
- Conducted in-depth research on specific technologies relevant to aeronautical investment companies, providing valuable insights to the investing team regarding potential opportunities.
- Effectively communicated technical concepts to the investing team, facilitating their understanding of the technology landscape and its implications for investment decisions.
- Designed and implemented databases for investment tracking and customer information systems, ensuring efficient data management and retrieval.
- Leveraged strong problem-solving skills to address challenges and optimize the functionality of the databases.
- Collaborated with team members to gather requirements and implement database solutions that met the needs of the investment and customer information systems.

Intern Backblaze, Inc., San Mateo, CA   **Summer 2019**
- Executed quality assurance tasks for a cloud backup company, including thorough testing and accurately documenting defects in the company's bug-tracking system.
- Developed an automated testing process, effectively utilizing various Backblaze B2 command line tools to streamline testing procedures and enhance efficiency.
- Took the initiative to establish an online presence for the company on Apple Maps and TikTok, expanding brand visibility and reaching a broader audience.
- Collaborated with team members to ensure the successful implementation of the online presence strategy, leveraging creative approaches to engage users on these platforms.

Interests

Snowboarding, Travel, Triathlons