

Ricardo Aguilar

805.698.4720 | aricky805@gmail.com | Santa Barbara, CA 93110 | <https://aricky3.github.io/ricardoPortfolio/index.html>

EDUCATION

Georgia Institute of Technology | Masters of Science, Computer Science – Machine Learning

University of California, San Diego | Bachelors of Science, Mathematics-Computer Science

WORK EXPERIENCE

Credit One Bank | Data Analyst

Sept 2024 – Present

- Parsed and processed over 1,200 data files monthly, automating operational workflows and reducing manual processing time, resulting in savings of over 48 working hours per month, totaling nearly 600 man-hours annually.
- Created Python scripts to optimize data retrieval and reporting, enhancing accuracy and reducing processing errors by 30%, which contributed to a 15% increase in team productivity.

Cita Marketplace | Software Engineer

Jul 2023 – Mar 2024

- Developed and optimized core features of the peer-to-peer reservation platform using Python, Django, and PostgreSQL, improving search efficiency by 35% and enhancing transaction reliability for over 10,000 monthly active users.
- Implemented and maintained CI/CD pipelines using GitHub Actions and Docker, reducing deployment times by 40% and ensuring the scalability of services to support a 50% growth in transaction volume.
- Designed and deployed a data analytics pipeline leveraging AWS Lambda, S3, and Redshift, enabling real-time tracking of user engagement, which increased platform utilization by 25% through data-driven feature updates.

UC San Diego Bioinformatics | Software Engineer Intern

Mar 2021 – Jun 2021

- Collaborated on a React-based web application, enhancing data visualization for medical professionals and boosting analysis efficiency by 67% across 300 users.
- Streamlined large-scale data parsing and graphical presentation, improving accessibility and insights for medical staff.

LEADERSHIP EXPERIENCE

Komodo Software | Co-Owner <http://www.komodomonitors.software/>

Dec 2020 – May 2022

- Co-founded a startup providing 24/7 monitoring services for high-demand items, utilizing automation and scripting
- Orchestrated a high-performing team of 10 in Agile software development, fostering collaboration and knowledge sharing; the approach resulted in a 50% increase in on-time project deliveries and elevated stakeholder satisfaction.

Interfraternity Council | President

Dec 2021 – Jan 2022

- Spearheaded a team of 12 as President of UCSD's Interfraternity Council, ensuring safe campus operations.
- Oversaw a \$100k budget for local charity contributions, demonstrating financial management acumen.

SOFTWARE PROJECTS

Network Packet Sniffer

Mar 2024 – Jun 2024

- Developed a Python-based network packet sniffer to capture, parse, and analyze real-time network traffic, gaining proficiency in TCP/IP protocols and packet structures.
- Improved packet filtering by 30%, enhancing accuracy and reducing processing delays.

Banking Application

Jan 2024 – Mar 2024

- Completed a distributed microservices application using Python and Docker, achieving scalable, fault-tolerant backend architecture capable of handling high traffic loads.
- Achieved a 25% reduction in deployment times through container orchestration with Kubernetes, increasing reliability in cross functional workloads.

Satellite Orbit Simulation Tool

Jan 2024 – Feb 2024

- Created a real-time Python simulation for low-Earth orbit satellite prediction, improving accuracy in collision avoidance analysis by 15%.
- Implemented high-performance numerical methods for real-time trajectory computation, leveraging vector mathematics and physics libraries to optimize satellite maneuver planning.

TECHNICAL STRENGTHS

Computer Languages

Python, Java, JavaScript, C, C++, C#, Assembly, MatLab, Bash, React, Swift, Go, Objective-C, Unity

Tools & Frameworks

Numpy, Pandas, SeaBorn, Node.JS, Git, Vim, Ubuntu, AWS, Xcode, Android Studio, Jenkins, 5G NR