Renato Adolfo Diaz

✉ diazrenato2001@outlook.com   📞 (321) 663-1178   📍 Orlando, FL   ⚦ he/him

in linkedin.com/in/renato-diaz   ⊙ github.com/NrgNinja   🔗 renatodiaz.com

🎓 EDUCATION

University of Central Florida, *Computer Science, B.S.* ↗   Aug 2021 – Dec 2024
NACME Corporate Scholar, SHPE UCF Chapter Member, LEARN Alumni | GPA: 3.4   Orlando, FL

💼 PROFESSIONAL EXPERIENCE

Big Data SWE Research Intern, *Illinois Institute of Technology* ↗   May 2024 – Aug 2024
       Chicago, IL

- Engineered a multi-threaded cryptographic hash tool in Rust, designed to enhance Proof-of-Space consensus algorithms for blockchain systems in big data contexts; focusing on throughput while maintaining green computing measures.
- Authored and executed over 10 automated benchmark scripts in Bash & Python to quantify performance metrics of our tool & achieved ~300% better throughput & substantially lower latency compared to the existing state-of-the-art solutions.
- Collaborated with 3 software engineers at the DataSys Lab to prepare and submit published research findings at major national supercomputing conferences.

Software Engineer Intern, *Autodesk* ↗   May 2023 – Aug 2023
       San Francisco, CA

- Improved an automated anomaly detection tool for the CLS team, enhancing the monitoring of over 400 critical licensing services on AWS with Java development.
- Implemented 3 unsupervised machine learning detectors and monitors in Kibana to identify & alert on unusual activities every 10 minutes in licensing service logs, minimizing the need for manual oversight from other senior software engineers.
- Designed and built Slack integrations for real-time anomaly notifications, improving the team's response times to potential disruptions by approx. 200%.

Software Engineer Intern, *Endpoint* ↗   Jun 2022 – Sep 2022
       El Segundo, CA

- Developed over 6 functional unit and integration tests in Python to validate over 12 REST APIs utilized in the Automation Squad's SwaggerHub API platform.
- Contributed to enhancing the CI/CD pipeline by developing *happy path* test cases, significantly reducing manual testing time & allowing 20% of senior engineers on the Automation Squad to prioritize other advanced development tasks.
- Gained proficiency in Agile (Scrum) methodologies, participating in daily standups and bi-weekly sprints & retros using Atlassian Jira for task management.
- Mastered version control practices with Git, managing code in the 10,000+ line project repo and collaborating effectively within a distributed team environment.

</> TECHNICAL SKILLS

Programming Languages
Python, Java, C, Rust, Bash, JavaScript, HTML/CSS

Libraries
Pandas, NumPy, Matplotlib, Rayon, BLAKE3

Frameworks
React, Node.js, Express.js, .NET, Spring, ROS, OpenCV, PyTorch, Flask

Developer Tools
Git, Linux, VSCode, Ubuntu, Kibana, Microsoft 365, AWS, Unity, Jira, Azure, MongoDB, Jupyter Notebook