Julian Ubico

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Education

University of Florida

August 2021 - May 2025

Bachelor of Science in Computer Science

Relevant Coursework: Programming Fundamentals I & II, Applications of Discrete Structures, Data Structures and Algorithms, Algorithm Abstraction and Design, Enterprise Software Engineering, Information and Database Systems, Operating Systems, Computer Network Fundamentals, Programming Language Concepts, Introduction to Computer Organization, Introduction to Data Science, Physics I & II, Calculus I, II & III, Engineering Statistics, Computational Linear Algebra

Technical Skills

Programming Languages: Python, Java, C, C++, JavaScript & TypeScript (ReactJS, NodeJS), Go, SQL, HTML/CSS

System Administration: Linux (Ubuntu, CentOS), NGINX, Bash Scripting, Git, Docker, Kubernetes, Jenkins, GitHub Actions

Technologies: AWS (DynamoDB, EC2, S3, Lambda, RDS), Azure, Transformers, PyTorch, Scikit-learn, OpenCV, Jupyter, Flask

Languages: English (Fluent, Native), Spanish (Fluent)

Experience

Software Engineer Intern

June 2024 - August 2024

Remote — Boston, Massachusetts

Tech For Good Inc.

- Reduced **cloud** costs by **up to 30%**, demonstrated through improved resource efficiency, achieved with the **PyTorch** library in **Python** for spot usage optimization.
- Improved real-time data synchronization, evidenced by handling 50,000+ daily requests with 99.9% uptime, utilizing Spring Boot in Java for API development.
- Upgraded system infrastructure by optimizing **Kubernetes** resource utilization, accomplished through scalable deployment designs.

Electric Vehicle Service Intern

June 2023 - August 2023

 $Tesla\ Motors$

Miami Gardens, FL

- Diagnosed **Tesla** vehicles effectively, illustrated by successful high-voltage battery and drive unit replacements, executed with **Toolbox 3** and **Toolbox Proxy** tools.
- Isolated electrical faults precisely, validated by safe handling of 400 volt systems, achieved using Fluke high-voltage multimeters.

Projects

DirtCraft Modded Minecraft Network | Java, MySQL, NGINX, Jenkins, Linux

- Founded and managed DirtCraft, which achieved the #1 global ranking among modded Minecraft networks, by attracting over 200,000 unique players and generating over \$10,000 in monthly revenue through monetization strategies.
- Maintained 99.9% uptime, ensuring uninterrupted player access, by implementing CI/CD pipelines using Jenkins with GitHub webhooks, NGINX for load balancing, and custom Bash scripts for automated deployments, backups, and log analysis.
- Increased player retention by 50%, tracked through MySQL database analytics and user activity stats, enabled by Java-based plugins developed with SpongeAPI to enhance the gameplay experience.

MathWhiz — 3rd Overall @ SwampHacks X | Manim, Flask, OpenAI, React, PostgreSQL, Cloudflare Workers

- Secured **3rd place overall** out of 350 participants, by developing an interactive AI-powered educational tool that dynamically **generates animated math and physics videos**.
- Developed an AI-driven educational platform that improved student comprehension by integrating Manim for dynamic mathematical animations, **OpenAI API** for realistic voiceovers, and an **interactive quiz system** to reinforce learning.
- Improved output reliability by 40%, eliminating the need for manual adjustments on animations, by fine-tuning a machine learning model trained on a high-quality dataset of Manim scripts and preprocessing data for consistency.

Full Stack Server Administration Panel | React, Express, Java, MySQL, WebSocket

- Pioneered a full-stack administration panel by leveraging **React** for interactive user interfaces, **Express** with **Java** for backend logic, and seamlessly integrating **MySQL databases** to manage and monitor multiple interconnected game servers.
- Enabled secure file transfers and streamlined server updates by implementing granular permissions, delivered through an integrated SFTP server.
- Improved overall server efficiency, quantified by an average **20-hour reduction** in weekly workload, accomplished by automating routine tasks and utilizing **WebSockets** for real-time monitoring.