Nicole Hernandez

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Education

Georgia Institute of Technology | Atlanta, GA   *January 2022 – December 2024*
Bachelor of Science in Computer Science, GPA 3.74   Faculty Honors, Dean's List
- Coursework: Machine Learning (Fall 2024), Systems & Networks, Computer Organization & Programming, Design & Analysis of Algorithms, Computer Graphics, Computer Audio, Computer Simulation, Combinatorics

Georgia Southern University | Statesboro, GA   *Graduated December 2019*
Bachelor of Science in Civil Engineering, GPA 3.97   Summa Cum Laude

Experience

Microsoft – Azure HPC/AI   *May 2024 – August 2024*
Software Engineering Intern   Atlanta, GA
- Developed and automated a daily pipeline trigger, enhancing the efficiency of resource validation and deployment processes. ***(PowerShell, Azure Pipelines, Kusto Query Language)***
- Created and integrated PowerShell scripts to dynamically manage and update VM Scale Sets (VMSS) configurations, ensuring optimal performance and compliance.
- Implemented a feature to select specific VMSS resources for checks during manual pipeline runs, improving flexibility and control in resource management.
- Optimized VMSS tag checking and configuration by utilizing hash tables and ensuring accurate default and blocking tag application.
- Enhanced the Perfgate VMSS Creation Function App by updating the accelerated networking feature and adding a scan mode for resource monitoring, reflecting attention to detail and a commitment to quality.

Amazon – Robotics AI   *May 2023 – August 2023*
Software Development Engineering Intern   Nashville, TN
- Analyzed a dataset of 10,000+ samples against segmentation, CRAFT, and OCR deep learning models. ***(Python)***
- Plotted data visualizations of key findings derived from the analysis. ***(Python, Jupyter Notebook, Matplotlib)***
- Authored a comprehensive research document outlining the data analysis procedure and insights derived.
- Designed a text-from-image recognition service using pre-trained machine learning models on CUDA. ***(Python)***
- Implemented said service to reduce operational costs in fulfillment centers by around $50M annually. ***(Python)***
- Reduced annotation costs and Takt time by 80% by designing & implementing an annotation pipeline to improve existing machine learning models. ***(Python, AWS Lambda, SageMaker Ground Truth, DynamoDB)***
- Authored clear and detailed design documents for the text-from-image recognition service pipeline and annotation pipeline, outlining approaches and integration tests.

The Home Depot – OrangeWorks   *August 2022 – December 2022*
Software Engineering Intern   Atlanta, GA
- Used ROS to collect LiDAR data from a robotic quadruped scanning different distribution centers.
- Extracted point clouds and improved scanning accuracy by reducing the speed of the quadruped. ***(Python)***
- Created and presented an application prototype to stakeholders, increasing financial support by 20%. ***(Figma)***
- Designed several unit and integration tests, resulting in a 99% uptime when running the service. ***(Python)***

Cardano Blockchain (self-employed)   *July 2020 – November 2020*
Stake Pool Operator   Remote
- Managed three stake pool nodes on Google Cloud Platform with over $3.5M in combined staked assets.
- Generated sensitive files in an air-gapped offline machine and stored them in a 256-bit AES encrypted device.

Skills

Programming Languages: Python, PowerShell, Java, C, C#
Technologies: AWS, SageMaker Ground Truth, PyTorch, Tensorflow, Computer Vision, OpenGL, CUDA, ROS
Languages: Spanish (native), English (fluent), Japanese (intermediate), Italian (beginner)