

# Nicole Hernandez

Permanent Resident | Atlanta, GA | (912) 541-1768 | g.nicole@gatech.edu | <https://gnicoleh.github.io>

## Education

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### Georgia Institute of Technology | Atlanta, GA

January 2022 – December 2024

Bachelor of Science in Computer Science, GPA 3.64

Dean's List

- Coursework: Systems & Networks, Design & Analysis of Algorithms, Computer Graphics (Fall 2023), Information Visualization (Spring 2024), Computer Modeling Algorithms (Spring 2024), Computer Simulation (Spring 2024)

### Georgia Southern University | Statesboro, GA

Graduated December 2019

Bachelor of Science in Civil Engineering, GPA 3.97

Summa Cum Laude

## Experience

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### 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. (**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 detection service and annotation pipeline, outlining approaches and integration tests.

### The Home Depot - OrangeWorks

August 2022 – December 2022

Software Engineering Intern

Atlanta, GA

- Used ROS to analyze LiDAR data obtained 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.

### Georgia Department of Transportation

February 2020 – December 2021

Civil Engineer 2 – Preconstruction, Design

Atlanta, GA

- Led the design bridge replacement projects from concept to final submission and presented to stakeholders.
- Developed prioritization skills to make the best possible decision to deliver results above company standards.
- Analyzed problems by evaluating information and resources; developed effective, viable solutions to problems.

## Projects

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### Game Suite | C#, Unity

July 2022

- Designed scenes, game objects, scripts, prefabs, and animations as required, maintaining proper file organization.
- Implemented 2-week long sprints agile methodology and applied project management using ZenHub for GitHub.
- Followed SOLID and GRASP principles as well as design patterns during the development process.

### Jordle | Java, JavaFX

April 2022

- Developed a playable Java Wordle UI to progressively guess a random 5-letter word correctly.
- Defined an inner class which overrides a KeyEvent handler whenever the user releases a key.

## Skills

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**Programming Languages:** Python, Java, C#

**Technologies:** AWS Lambda, SageMaker Ground Truth, PyTorch, Tensorflow, Computer Vision, DynamoDB

**Languages:** Spanish (native), English (fluent), Japanese (intermediate), Italian (beginner)