# **Amaad Martin**

■ amaadomartin@gmail.com
□ 1-15 28th street
□ 762-258-2474

## **EDUCATION**

**Carnegie Mellon University** 

08/2021 – May 2025 (Expected) Pittsburgh, Pennsylvania, United States

Bachelor of Science in Computer Science Concentration in Machine Learning GPA: 3.4

Fair Lawn High School

09/2017 - 06/2021 Fair Lawn, New Jersey, United States

GPA: 4.4

#### **EXPERIENCE**

#### **Software Development Engineer**

- Created a new service to help internal customers
- Automated internal process for other SDE employees
- Optimized process efficiency by **500%**
- Integrated existing CLI commands into easy-to-use UI

# 05/2023 - 08/2023 Seattle, Washington, United States

# **PROJECTS**

# doidVerse: Real-Time Evolution Simulator

05/2022 - 08/2022

- Created a real-time Evolution Simulator in C# with **Unitv3D**
- Implemented **NEAT** (NeuroEvolution of Augmenting Topologies) algorithm to find optimal neural network configuration
- Leveraged graph neural networks, with adjacency list representations, allowing for mutable neural networks
- Developed recurrent graph neural network architecture
- Designed procedurally generated maps utilizing cellular automata
- Optimized search space so optimal configurations are found in less than 5 minutes
- Combined 200+ hours of work, 2000+ lines of code

# GameOf Evo: Cellular Automata Evolution Simulator

04/2022 - 05/2022

- Created cellular automata-inspired evolution simulator in Python using networkx, matplotlib, cv2, and NumPy
- Designed graph neural network using edge list **implementation** to allow for mutations
- Integrated natural selection algorithm to pick optimal configurations to reproduce
- Combined **80+** hours of work, **1000+** lines of code

## COURSES

# 15-210 (Parallel and Sequential Data Structures and Algorithms)

10-315 (Intro to Machine Learning)

15-213 (Intro to Computer Systems)

21-259 (3D Calculus)

15-122 (Data Structures & Algorithms)

36-218 (Probability Theory)

21-128 (Discrete Math)

15-251 (Great Ideas in Theoretical Computer Science)

#### ORGANIZATIONS

# ColorStack

Operations Chair (E-Board)

#### Carnegie Mellon Black Male Collective

Organization Collaboration & Small Events Chair (E-Board)

**National Society of Black Engineers** 

**SPIRIT Black Student Organization** 

#### **SKILLS**

• C • C# Python

• Java

• SML • LaTeX • Command Line

• Git