

Summer 2023 SWE Internship or ML Research position

Education

Carnegie Mellon University

Aug 2021 – present | Pittsburgh, United States

BS Computer Science 2025

Concentration in Machine Learning

Fair Lawn High School

Sep 2017 – Jun 2021 | Fair Lawn, United States

- took ten AP classes
- Head of drumline in Marching Band

Projects

doid Verse: Real-Time Evolution Simulator $\,\mathscr{D}\,$

Lead Software Engineer

May 2022 - Aug 2022

- Created a real-time **Evolution Simulator** in **C#** using **Unity3D**
- Implemented **NEAT (NeuroEvolution of Augmenting Topologies)** algorithm to find optimal neural network configuration
- Made agents with randomized graph neural networks, using an adjacency list implementation, that converge to the optimal configuration through natural selection
- Made procedurally generated maps with cellular automata
- Optimized the search space so optimal configurations are found in less than 5 minutes
- Put in 200+ hours of work. 2000+ lines of code

GameOfEvo: Automata Inspired Evolution Simulator *∂* Lead Software Engineer

Apr 2022 - May 2022

- Created an Automata Inspired **Evolution Simulator** in **Python** using **networkx**, **matplotlib**, **cv2**, and **numpy**
- Implemented agents with **graph neural networks** that only reproduce the next generation if they meet some arbitrary criteria
- Used **natural selection** to pick the optimal configurations to reproduce
- Put in 80+ hours of work. 1000+ lines of code

hthsHacks: AniLarm Rodent Detector &

Software Engineer

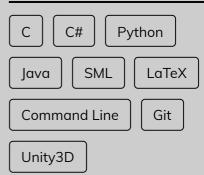
May 2020

- Developed Python program using harrcascasdes, OpenCV, and arduino to notify farmers of rodents eating crops
- Made with group of 4 for the **hthsHacks** Hackathon which took place on May 16, 2020
- Created to solve the problem of food shortages due to COVID-19

Amaad Martin

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- AmaadMartin





Courses

21-259 Calculus in 3-D

07-180 Concepts in Al

21-128 Math Concepts & Proofs

15-122 Principles of Imperative Computation

21-241 Matrices & Linear Transformations

15-150 Principles of Functional Programming

Organisations

ColorStack
Operations Chair

Carnegie Mellon Black Male Collective

Organization Collab & Small Events Chair

National Society of Black Engineers

SPIRIT Black Student Organization