

**OBJECTIVE:** Summer/Winter 2023 Internship or Research position in CS/ML

## EDUCATION

### Carnegie Mellon University

AUGUST 2021 - CURRENT

- BS **Computer Science** 2025
- Concentration in **Machine Learning**

### Fair Lawn High School

GPA: 4.4

SEPTEMBER 2017 - JUNE 2021

- **Ten AP** classes taken in total
- All Honors besides AP classes
- In seven clubs

## PROJECTS

### doidVerse: Real-Time Evolution Simulator

MAY 2022 - AUGUST 2022

- Realtime **Evolution Simulator** built in **Unity3D** using **C#**.
- Agents are born with randomized **neural networks**, using **adjacency list** implementation, that converge over time due to the laws of **natural selection (NEAT algorithm)** to the optimal configuration for survival and reproduction.
- Utilizes **cellular automata** to **procedurally generate** world.

### GameOfEvo: Automata Inspired Evolution Simulator

APRIL 2022 - MAY 2022

- Automata Inspired **Evolution Simulator** written in **Python** using **networkx**, **matplotlib**, **cv2**, and **numpy**.
- Agents are born with randomized **neural networks** and only reproduce the next generation if they meet some arbitrary criteria. This causes the neural networks to become optimal in satisfying the criteria.

### hthsHacks: AniLarm Rodent Detector

MAY 2020


- Developed **Python** program using **harrcascades**, **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
- Theme of hackathon was solving problems Covid created so we made AniLarm to solve a potential food shortage

## Amaad Martin

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<https://github.com/AmaadMartin> 

<https://amaadmartin.github.io/portfolio> 

## SKILLS

### PROGRAMMING LANGUAGES

C

C#

Python

Java

SML

LaTeX

### TOOLS/Frameworks

Unix Command Line

Git

Unity3D

## COURSEWORK

21-259 Calculus in 3-D

07-180 Concepts in AI

21-128 Math Concepts & Proofs

15-122 Principles of Imperative Computation

21-241 Matrices & Linear Transformations

15-150 Principles of Functional Programming

## HOBBIES/CLUBS

ColorStack - Operations Chair

CMBMC - Org Collab & Small Events Chair

NSBE (National Society of Black Engineers)

SPIRIT Black Student Organization