

## Ajay Sarathy

### PROGRAMMING SKILLS

**EXPERIENCED:** Java, Python, Django, Haskell, Heroku, HTML, CSS, Git

**FAMILIAR:** TensorFlow, Scikit-learn, Keras, C++, JavaScript, ProLog, Ruby, React, Arduino

### EDUCATION

**AMHERST COLLEGE, AMHERST MA, B.A. (COMPUTER SCIENCE)**

*August 2018 – May 2022*

Relevant Coursework: Programming Language Paradigms, Data Structures,  
Computer Architecture

**UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA PA, B.A.**

*August 2017 – May 2018*

Dean's List

### EMPLOYMENT

**FREELANCE WEB DEVELOPMENT, REMOTE**

*August 2020 - Present*

Built full-fledged websites to the defined functionality and design requirements of clients. Gained experience in front-end development, back-end development, and client management.

**AMHERST COLLEGE ROBOTICS FELLOWSHIP, AMHERST MA**

*June 2019 - August 2019*

Designed, prototyped and built 3 intelligent robots to ASME competition specifications. Gained experience in robotics programming using C++, 3D printing, CAD, and project management.

### PROJECTS

**COLLECTIVE INTELLIGENCE ALGORITHM SIMULATION**

Collective intelligence, or amorphous computing, is a computing model that draws inspiration from how biological systems utilizes a large number of relatively simple units to produce complex emergent behavior solely through local interaction between units. Developed and built a simulation that intelligently mimics emergent behaviors found in nature such as firefly synchronization. (JavaFX)

**GAME AI TRAINING WITH NEAT**

Trains an AI to play simple video games such as Super Mario Bros and Flappy Bird using the NEAT algorithm. NEAT, short for neuroevolutionary of augmenting topologies, is a genetic algorithm that allows neural networks to evolve neural networks in model that imitates biological evolution. (Python)

**PERSONAL WEBSITE**

Created a website to display my personality and interests while also showcasing my web development skills. Built the front-end design from scratch without the use of any CSS templates or Bootstrap. Generated advanced analytics and visualizations of activity data pulled from the Strava API. (Django)

### ATHLETICS

**CROSS COUNTRY & TRACK AND FIELD**

*August 2013 - Present*

**Amherst College:** Captain. Won the 2018 XC NESCAC team championship and the DIII New England Regional team championship. Placed 16<sup>th</sup> at the 2018 XC NESCAC championships and named all-region at the New England Regional championships.

**University of Pennsylvania:** Varsity Runner. Competed as a Quaker at the D1 level for three seasons.