# Ajay Sarathy

### **PROGRAMMING SKILLS**

FLUENT: Java EXPERIENCED: Haskell, C++, JavaFX, Arduino, HTML, CSS FAMILIAR: Python, ProLog,

Ruby, Git, JavaScript

#### **EDUCATION**

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

August 2018 - December 2021

GPA: 3.43, Relevant Coursework: Programming Language Paradigms, Data Structures,

Computer Architecture

UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA PA, B.A.

August 2017 – May 2018 GPA: 3.75, Deans List

#### **EMPLOYMENT**

## 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++/Arduino, 3D printing and project management.

## PRINCETON RUNNING COMPANY, PRINCETION NJ

*June 2018 – August 2018* 

Fitted customers to their proper running shoe type through technical evaluations of their gait cycle and running mechanics.

## **PROJECTS**

### AMORPHOUS ALGORITHM SIMULATION

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)

## JAPANESES CROSSWORD, KURODOKO, KUROTTO GAME

Designed a graphical user interface that allows players to generate and play a Japanese crossword, Kurodoko puzzle, or Kurotto puzzle as desired. Implemented a solving algorithm that will solve any that can solve any of the 3 puzzles correctly. (Java Swing)

## **MINESWEEPER GAME**

Created a program that produces a game of minesweeper with the specified board size and number of armed mines as inputted by the player. (C++)

#### **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.