MATTHEW PAULY

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Education

Harvard University

Cambridge, MA

A.B., Mathematics and Computer Science, 3.71 GPA

Expected Graduation May 2023

Work, Leadership, and Projects

CS 50 Course Assistant

September 2020 - December 2020

Harvard University

Held office hours every week to help students with their work in CS 50 Intro to Computer Science

Card Game Machine Learning Agents Personal Project

July 2020

Personal coding project, built two separate computer agents, one using deep reinforcement learning and one with Information Set Monte Carlo Tree Search, for the card game Gang of Four (https://github.com/mtp61/gof_PPOalgorithm, https://github.com/mtp61/gof_ISMCTS)

Image Recognition Project Saint Paul Academy

May 2019

Senior Project at Saint Paul Academy, collaborated with other students along with instruction from a University of Minnesota graduate student to build a deep neural network for image classification of objects relevant to self-driving cars (traffic lights, stop signs, etc.) from scratch, ultimately achieving ~93% accuracy (https://github.com/mtp61/ImageClassificationNeuralNet)

Eagle Scout 2011 - 2018

Boy Scout Troop 110

Served as Senior Patrol Leader; Directed Eagle Scout Project involved preservation of the Latham Raspberry, a 98 year-old University of Minnesota variety

Skills and Interests

Software Development: Data Structures and Algorithms, Object Oriented Programming **Programming Languages:** Moderate experience with Python and Java; some experience with C, C++, Javascript, and HTML

Interests: Personal Coding Projects (https://github.com/mtp61), Board & Card Games, Backpacking, Ultimate Frisbee — play for Redline, the top men's team at Harvard