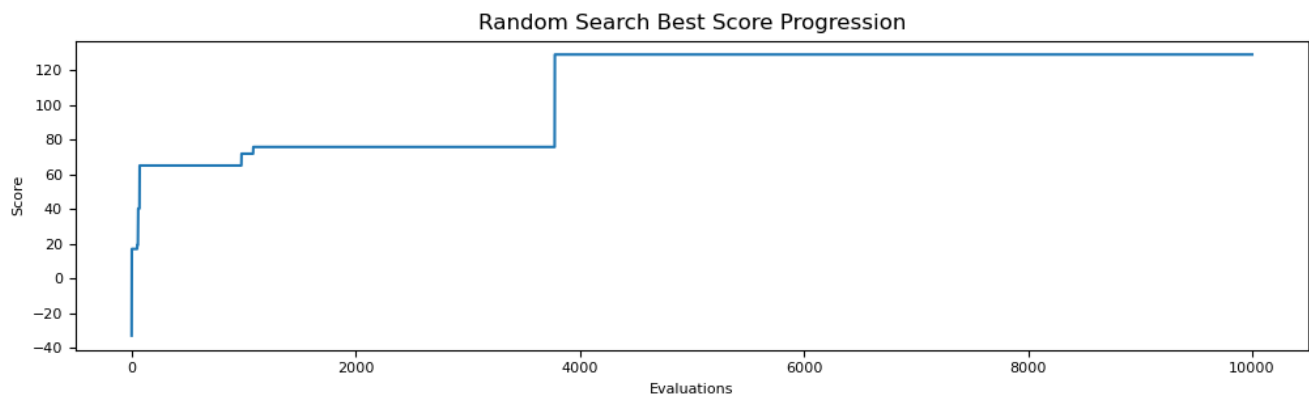Sujay Jakka

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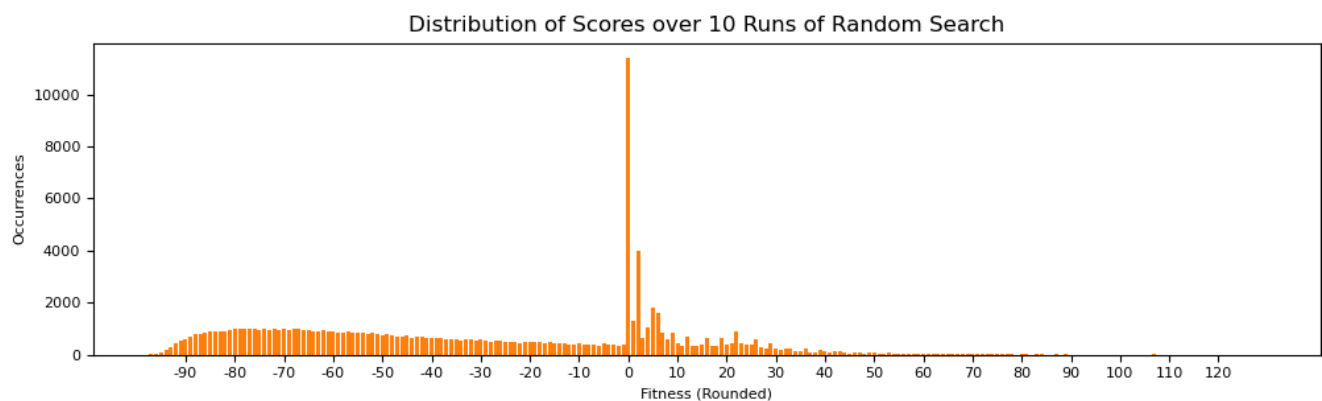
COMP 5660 Fall 2024 Assignment 2a

3 November 2024

<center>Assignment 2a Report</center>

The plot below is of my stair-step plot of the run that yielded the highest score overall.



Furthermore, the histogram shows the distribution of scores of various Pac-Man controllers over

the course of 10 runs(100,000 agents).



The mean of the best scores across all 10 runs is 114.254, and the standard deviation is 13.367.

After looking at the visualization of the highest-scoring game, I believe my agent in that game

did well. It did a good job heading towards the pills and the fruits and moving away from the

ghosts. However, a problem I noticed was that the controller would be too afraid to head towards

the pills if the ghosts happen to be in the same direction as the remaining pills. This would cause

Pac-Man to exhibit behavior such as heading toward a corner or staying in the same region until

the ghosts moved. This behavior can be problematic once the ghosts actually start to move

intelligently. The following is the image showing the scenario I described above.