

Some Title

Nathan, JP

February 22, 2022

1 Problem Statement

200 words max

1. Clearly describes the problem being addressed
2. References any external resources that support this problem (e.g. data sets, simulation/game environment, etc.)

The goal of the project is to train an AI to be very good at poker(Texas Holdem), in order to do this a poker game will be created. This game will allow human vs AI(for testing) and AI vs AI(for training).

2 Proposed Approach

300 words max

1. Identifies the type of AI/ML approach to be used to address the problem, e.g.
 - (a) Search
 - (b) Classification
 - (c) Prediction/regression
 - (d) Reinforcement Learning
2. Describe how your problem relates to the proposed approach (i.e. how do you map the problem to the approach?)
3. Identify any planned libraries, resources, etc. you intend to utilize to facilitate your approach

In order to train the model, the system will be forced to play against itself in order to improve its skills, this unsupervised approach is used as the system does not have labeled correct plays, due to hidden information. One possible method of training could be [1] where neurons are added in between generations.

3 Team Structure

1. Identifies team members
2. Identifies any relevant background of team member(s) to the problem, if applicable
3. Identifies roles and responsibilities of team members

uhhhhhh we should probably meet about this

4 Refferences

1. Document includes references to any frameworks, simulation environments, data sets, problem descriptions, etc. used in this write-up
2. Citations and inline references are in IEEE format

References

- [1] Wikipedia. “Neuroevolution of augmenting topologies.” (2021), [Online]. Available: https://en.wikipedia.org/wiki/Neuroevolution_of_augmenting_topologies. (accessed: 02.22.2022).