

CS 480/\

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Project Proposal

Approach: Genetic Algorithm and Neural Network

Area: Machine Learning/Game-playing Agent

Description:

- The environment is a 2-D game board, with enemy tanks, destroyable obstacles and rewards. The game is based on the old school "Battle City" Game
- The basic actions will be to move up/down/left/right and shoot in the current moving direction.
- The goal of the game is to defend the base while eliminate all enemies without getting hit by the enemies.
- Through genetic algorithm and neural network, the agent will understand the rules of the game, and the final expectation is playing the game intelligently.

