

# Found In Space (How to Train Your Roboinvestor in 2D! v.2.0)

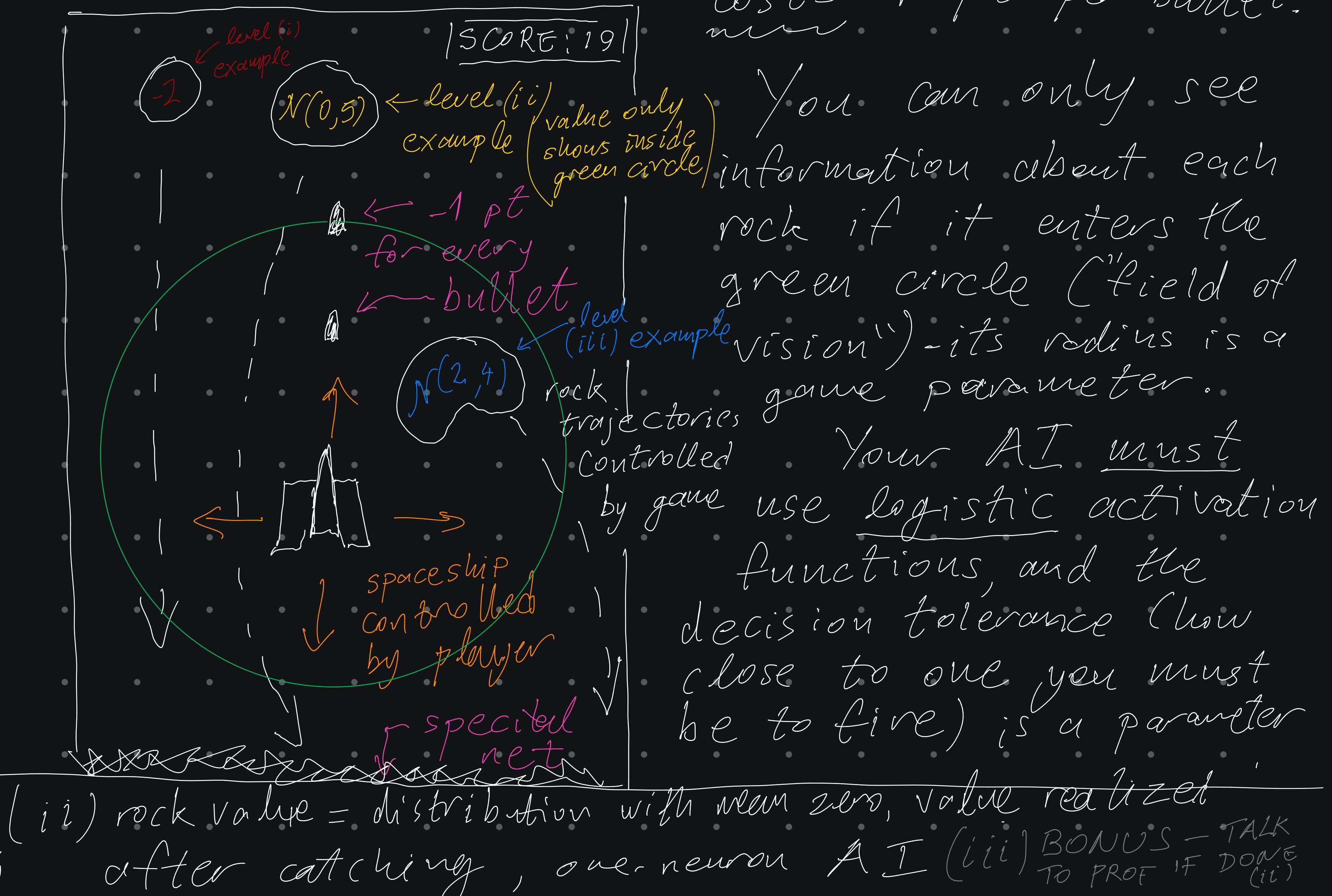
## Gameplay

You collect assets in space by flying a spaceship. Your goal is to maximize the total value of the assets collected, where each asset is represented by a rock, flying towards you. If you let the rock fly by, it will get caught by a "special net" and it will become part of your portfolio. If the rock crashes into you, game over.

Each rock has a value drawn from a distribution, and its realization may not necessarily be always positive. Assets of higher value are shown as larger rocks. In higher levels you must incorporate the risk reward relationship into the assets' motion (higher variance should also mean faster-moving rocks). You can shoot down unwanted rocks.

LEVELS: (i) rock value = realized r.v.s, one-neuron AI

You play twice, each time until you lose by getting hit by a rock. The first time you can shoot bullets. The second time you can fly, but the bullets are shot automatically by an AI trained to mimick your choices of shooting bullets during your first run. Firing bullets costs 1 pt per bullet.



(ii) rock value = distribution with mean zero, value realized after catching, one-neuron AI  
(iii) BONUS - TALK TO PROF IF DONE