Agent Description

For The 2nd International Aiwolf Contest

Team Udon

2020/11/01

1 SUMMARY

Developer is player of "Are You a Werewolf?" game.

Many indicators can be included by making the situation grasp, reasoning, action decision, and remarks independent.

The reasoning is not only about the suspicion of the agent alone, but also about the relationship between the agents.

2 GUESS METHOD

List all combinations of agents from the Werewolf team.

- In the case of a 15 player game, there are 5460 combinations.
- In the case of a 5 player game, there are 20 combinations.

For all those combinations, find a coefficient of validity of the combination and multiply all the coefficients. The coefficient is not necessarily an exact probability. Because it depends on the strategy of the opponent. It is an index that determines the coefficient whether it is a behavior that favors the werewolf, or whether the opponent agent has such a tendency.

Examples.

- The attacked agent has 0 times the chance of a werewolf. Confirm by game rules.
- During the game, the probability that more than half of the surviving agents are wolf is 0 times. Confirm by game rules.
- The probability of a wolf being both a voter and a voter is 0.7 times.

3 How to decide action

Decide who is best for each of the execution vote, divine, guard, and attack vote.

Find multiple coefficients for good behavior and multiply all coefficients.

For each action, target the agent with the highest coefficient.

- The villager team will vote for suspicious persons.
- Wolves prioritize voting for villagers who are likely to be executed in order to avoid execution of werewolves.
- Possessed vote to avoid werewolf. To that end, I have two viewpoints: a viewpoint that assumes I am a villager team, and a viewpoint that I am a possessed.

4 TALK METHOD

Speak one of the following that meets the conditions first.

- 1. If seer or medium, I coming out my role.
- 2. If the declared vote target is different from the current vote target, I Talk my vote target.
- 3. Over

5 STRATEGY

5.1 15 PLAYER GAME

Increase the information and increase the reasoning accuracy on the premise that the villagers team does not lie. The werewolf pretends to be a villager. The possessed pretends to be a seer.

5.2 5 PLAYER GAME

Act for immediate benefits rather than accuracy.

The seer pretends to be a villager or seer. The werewolf pretends to be a villager or seer. The possessed pretends to be a villager.