# **HALU**



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#### 1. Overview

Our agent was implemented various strategies that incorporated many of the insights we would have if we were playing a werewolf. However, this strategy alone did not allow the agents to win many victories. This is because of the agent's movements that are unique to artificial intelligence werewolf games. Hence, we designed this agent to fight based on the analysis of the various battle situation. We also fixed bugs in the 2021 agent and enhanced it.

### 2. 5 players game method

We scored the agents to be voted on and executed the voting according to this score. In addition, before development, we listed all the battle situations and considered the most appropriate action to take to win each one. Therefore, we designed this agent to have the highest probability of winning in a battle of a five-person village, where the element of luck is strong.

## 3. 15 players game method

It is implemented in the same way as a five-person village, with predictions for various situation. As a result, this agent has a huge number of variables. The way this agent fights is to keep an eye on all the agents, all their talking, and all their actions. It is equipped with a system that can detect even the habits of agents that a human being would not be able to remember. In addition, through the analysis of the logs, it examines which of the past strong agents are close to the strategy, and estimates the strategy by matching them.

As for the learning and behavior of the agent, special noise is added to make it difficult for the opponent to learn about our behavior.

### 4. Acknowledgement

I would like to thank the management of the AIWOLF Competition for conducting it again this year. I wish for its further development in the future.