# Tomato's code description

#### • Team Summary

I am a member of society. I am a rule-based algorithm.

Also, This agent is based on my agent submitted to the 3st International Alwolf Contest.

class path: java,com.gmail.toooo1718tyan.Player.RoleAssignPlayer

#### • 5AIwolf

Common action

The action is determined from the following two factors.

- ♦ Number of agents with SEER CO on the first day
- $\diamond$  Number of SEER CO agents alive on Day 2
- > VILLAGRE

Subdivide the possible Role combinations on the second day.

POSSESSED/WEREWOLF CO on the second day, making a fake power play and tricking the werewolf.

► SEER

DivinedResult on the first day will talk "Species.WEREWOLF".

Possibly falsify POSSESSED/WEREWOLF on the second day.

> POSSESSED

If there is an agent who is SEER CO before me, I will hide.

> WEREWOLF

I may pretend to be SERR or VILLAGER.

Power play will be done on the second day if it is possible.

## • 15AIwolf

Common action

Believe in the results of divination.

Vote for the agent with more votes until the second day.

➤ SEER

All divination results will be talked about.

> MEDIUM

All divination results will be talked about.

➢ BODYGUARD

Protect with priority "MEDIUM > SEER > VILLAGER".

> POSSESSED

Always falsify the SEER.

It becomes easier to divination WEREWOLF as the day goes by.

> WEREWOLF

Falsify VILLAGRE and SEER.

### • Role Estimator

Uses Logistic regression.

The explanatory variables incorporate the following elements.

- ♦ Information get from the game
  - Example: date, turn
- ♦ Features related to CO
  - Example: Number of COs
- ♦ Features related to Vote
  - Example: Number of votes
- ♦ Features related to Estimate
  - Example: Estimated number of remarks

Also, the estimation is different for 5AIWolf and 15AIWolf.

➢ 5AIWolf

Adopt the combination of roles with the highest simultaneous probability.

➤ 15AIWolf

Compute the "distinctiveness" of each agent roles.

The "distinctiveness" was calculated as the product of the probabilities of the roles.

The position with the highest probability is the rols of the agent.

## • MetaStrategy

The following elements.

- Winning percentage
- Number of votes