

Creation day : 2023/08/17

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# **Agent Documentation of Gotsumori**

## **for the 5<sup>th</sup> International AI Werewolf Competition**

### **1. Overview**

This Agent was created based on Basket, the winner of the 4<sup>th</sup> International AI Werewolf Competition. In making improvements, I aimed to increase the win rate of the werewolf camp by improving the behavior of the werewolf camp.

### **2. Environment**

Development environment : JDK11

path: org.aiwolf.Gotsumori.GotsumoriRoleAssignPlayer

### **3. Algorithm**

#### 3.1. VILLAGER

Added a statement asking for a full opening on the first turn according to probability. In addition, the ratio of statements such as “think agent X is a werewolf” is increased in the first half of each day and the ratio of statements such as “will to vote” and “request a vote” are increased in the second half of each day.

#### 3.2. SEER

Added features similar to villagers.

#### 3.3. MEDIUM

Added features similar to villagers.

#### 3.4. BODYGUARD

Added features similar to villagers.

#### 3.5. WEREWOLF

Lower probability of medium CO and as the villager, added a statement asking for a full opening on the first turn according to probability. In addition, changed to CO after day 2 and not CO on the first day when cheating on a

role. Furthermore,

### 3.6. POSSESSED

Higher probability of seer CO and lower probability of medium CO. As well as the villager, added a statement asking for a full opening on the first turn according to probability. In addition, slightly higher probability of voting for someone who isn't a werewolf. Furthermore, changed to always say statements such as “divined agent X and it was a werewolf.” for agents who look like villagers when cheating as a fortune seer.