MyAgent: An agent submitted to the ANAC 2025 ANL league

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Abstract

In this report, I will describe the strategy and results of the agent I created, as well as some points to consider. In this agent, I aimed to optimize the agent as a center agent, but I had a hard time getting it to work the way I wanted it to.

1 Introduction

I have a center agent and an edge agent, so I tried to create agents that fit each strategy.

2 The Design of MyAgent

2.1 Coordination Strategy Centeragent

In the center agent, the utility value is the overall negotiation result, so it is designed to be flexible in accepting proposals from the other party.

2.2 Bidding Strategy

In the bidding strategy, the edge agents make aggressive proposals, while the center agents are flexible in their response.

2.3 Acceptance Strategy

In the acceptance strategy, a threshold is set and if it is above the threshold, it is accepted, and if it is below the threshold, it is not accepted.

3 Evaluation

The results of the online tournament were not very good. The reason for this is that when the agent functioned as the center agent, the strategy focused on

only one negotiation, so it was unable to optimize the whole and did not work well.

4   Lessons and Suggestions

In the case of the role of the center agent this time, the score was low because the focus was on one negotiation and not on the overall negotiation. Also, at first, the optimization of the whole was considered, but the programming ability was insufficient. In the future, I would like to gain programming ability so that I can optimize the negotiations when I am a center agent.

Conclusions

It was a lot of fun creating agents and having them compete against each other. I would like to participate again next year.