'NegoAgent': An Agent Submitted to The ANAC 2023 SCM League OneShot Track

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INTRODUCTION

- The OneShot track is a simpler form of the SCM world

- In OneShot track, the agents emphasize negotiations

- Agent $_{utility}$ = number of sets secures on specific day

- NegoAgent was based on the ideas of AdaptiveAgent and LearningAgent

- AdaptiveAgent considers his other negotiations

- LearningAgent learns about his different partners

DESIGN

- Both LearningAgent and AdaptiveAgent, assume price will only improve over time (hard headed)

- This year, the price range (P_{min}, P_{max}) is two consecutive values

- This constraint, makes agent's score insensitive to prices of agreements

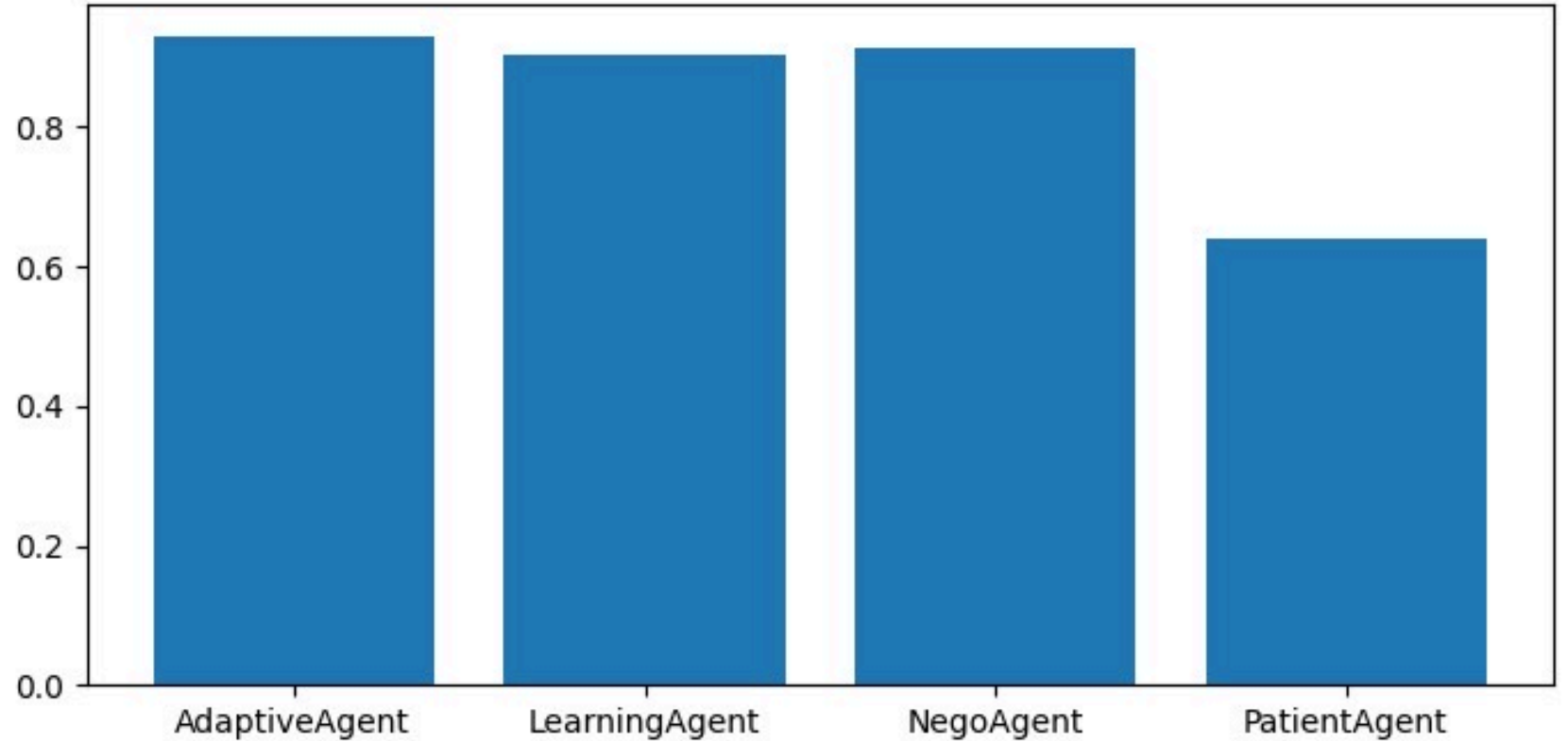- The importance is to emphasize the match between supply and demand

The agent behavior take in account the supply and demand in negotiation offers, and response in addition to the price

PERFORMANCE
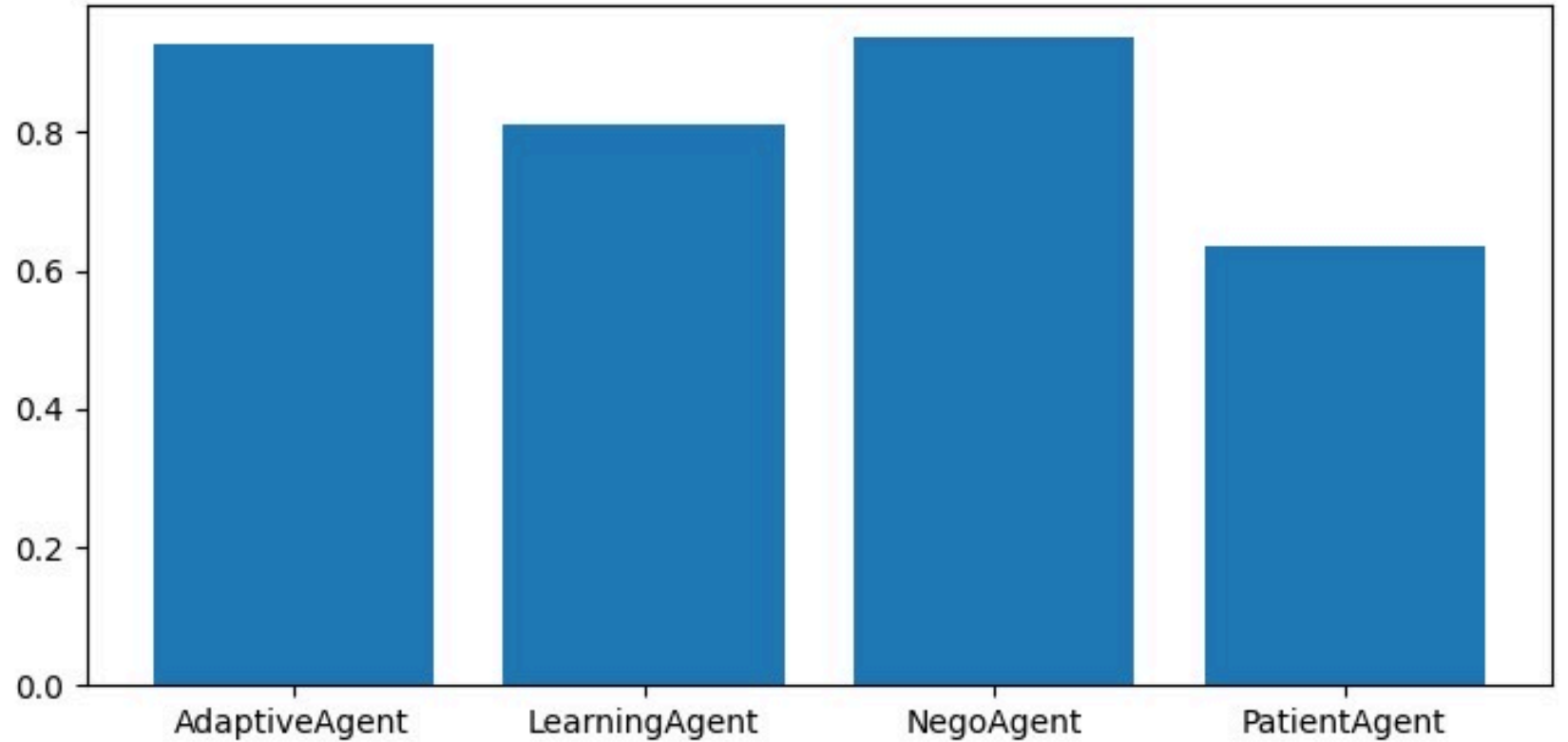
Comparison of NegoAgent to other agents performances- including last year winner (PatientAgent), after 10 steps (days)

PERFORMANCE

Comparison of NegoAgent to other agents performances- including last year winner (PatientAgent), after 100 steps (days)

CONCLUSIONS

- NegoAgent succeed in emphasizing the match between supply and demand without compromising on the price

- NegoAgent superior on other agents, including last year winner

- NegoAgent preforms well even after multiple steps (100 steps)