

Wheelin' and Dealin': Automated Negotiation Agents

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Automated Negotiating?

- Negotiating over a domain (money, job, goods, etc...)
- Humans typically do, but computers?
- ANAC ANL
- ANL 2023, personal vs social utility

Research Question

How does an altruistic bias and a selfishness bias affect the social utility of automated peer negotiating agents?

Hypothesis pt. 1

Given an **altruistic agent**, the average social utility of all agents negotiating will be higher than the average social utility without an altruistic agent.

Hypothesis pt. 2

Given a **selfish agent**, the average social utility of all agents negotiating will be the same as the average social utility without an selfish agent.

Findings

Wolfpack (altruistic) and **LoneWolf** (selfish) Agents did NOT AFFECT social or personal utility

Suggests interesting idea about the effect of one person/agent

DEMO!

Q & A