Comparing Human and Automated Agents in a Coordinated Navigation Domain
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Introduction
- Crowdsourcing lets us harness workers online to do tasks
- Can they play a game together if they can’t communicate or plan?
- Are they better than Artificial Intelligence (AI)?

Methods
- Recruited players from Amazon’s Mechanical Turk
- Players had to form the shape on the map with their pieces
- Time and move optimality (moves needed vs. moves taken) were measured

Conclusions
- Humans performed much slower than AI
- Humans had similar optimality to AI
- Slower movement may come from slow learning players (users who took much longer to play the game than normal)

Shape Tester Domain
- Similar to Pursuit Domain
- Players move to blue spots to complete a shape
- Simulates predators “cornering” a prey

Results

Move Optimality
- AI and human agents performed with comparable optimality

Time to Completion
- AI finished the ShapeTester game faster than humans in all cases.

References

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