CS344M
Autonomous Multiagent Systems
Spring 2008

Prof: Peter Stone

Department of Computer Sciences
The University of Texas at Austin

Good Afternoon, Colleagues

Are there any questions?

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- Mixed Nash equilibria?
- What can't game theory simulate?
- What if one player isn't rational?
- Doran's research

Logistics

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  "When Game Theory Isn't Enough: Engineering Agents for an Open and Imperfectly Rational World"
  Sevan Ficici, Harvard

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- Another one April 8th:
  "Computing Equilibria in Games"
  Konstantinos Daskalakis, UC Berkeley

Class Discussion

Mike Jordan on statistical tests

T-test vs. Paired T-test

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- Did you weigh less after the class than before?
- Who's better at tetris? Adam or Brandon?
- Who's better at video games in general?

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- Test: Your team better than UvA vs. Brainstormers

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- Test: Your team better than UvA vs. a set of 20 opponents

T-test vs. Paired T-test

- Test: Your team better than UvA vs. Brainstormers
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- What if neither is significant?

Matching Pennies

- We each put a penny down covered
- If they match, I win, if they don't, you win

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		Player 2: H	Player 2: T
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Nash equilibrium?

Rock/Paper/Scissors

- Nash equilibrium?
- Why is anything else **not** an equilibrium?

Mixed strategy equilibrium

		Player 2 Action 1	Player 2 Action 2
Player 1	Action 1	4,8	2,0
	Action 2	6,2	0,8

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- Player 2 must be indifferent between actions 1 and 2

Do actual numbers matter?