CS378
Autonomous Multiagent Systems
Spring 2005

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Week 10a: Thursday, March 31st

Good Afternoon, Colleagues

Are there any questions?

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- What if you don't know outcomes ahead of time?
- Can strategies in the iterated case be automated?

Logistics

- Project progress reports due next week

T-test vs. Paired T-test

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- Test: Your team better than UvA vs. a set of 20 opponents
- What if neither is significant?

Student-led discussion

- Zac on real-world uses of game theory

Mixed strategy equilibrium

		Player 2	
		Action 1	Action 2
Player 1	Action 1	2,2	2,0
	Action 2	3,1	0,2

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Correlated Equilibria

Sometimes mixing isn't enough: Bach/Stravinsky

		Wife	
		S	B
Me	S	2,1	0,0
	B	0,0	1,2

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Want only S,S or B,B - 50% each

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- We will both be in Paris for some time in June.
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- We have no way of getting in touch.
- When and where?
- What are the Nash equilibria?

Incomplete Information Games

- We each get one of 3 cards: 1,2,3
- If we both fold, we both lose nothing
- If one raises and one folds, the raiser gets 1
- If both raise, the one with the higher card gets 5
- Zero sum

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		Card ?	
		R	F
Card 3	R	5,-5	1,-1
	F	-1,1	0,0

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		Card ? R	Card ? F
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- 3 $\Rightarrow$ raise

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With more numbers and/or different payoffs, bluffing can be a part of the Nash Equilibrium