

CS344M

Autonomous Multiagent Systems

Patrick MacAlpine

Department of Computer Science
The University of Texas at Austin

Good Afternoon, Colleagues

Are there any questions?

Logistics

- Peer reviews due Thursday

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- Final tournament: 12/9 at 7pm in GDC 5.302 (this room):

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- Final projects due in 3 weeks!
 - PhD Proposal: Katie Genter Wednesday 9am in GDC 7.808 “Fly with Me: Algorithms and Methods for Influencing a Flock”

Distributed Rational Decision Making

Self-interested, rational agent

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The protocol is key

Evaluation Criteria

- Social welfare
- Pareto efficiency
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- Efficiency (computational, communication)

Voting vs. auctions

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 - result affects all

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- Auctions: maximize profit
 - result affects buyer and seller

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- 1st price auction for my pen
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- Write down your bid
- Repeat with 2nd price auction
- Number under the line is your utility

Auctions

- Valuations:

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 - second-price sealed-bid (Vickrey)

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Revenue equivalence: private-value, risk-neutral

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- What if it's an antique?

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Auctions vs. voting

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 - result affects buyer and seller
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What about Clarke tax algorithm?