CS378
Autonomous Multiagent Systems
Spring 2004

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Week 12a: Tuesday, April 13th

Good Afternoon, Colleagues

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- Go over Gibbard-Satterthwaite
- Can you get around Arrow by weighting preferences?

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  - Use undergraduate writing center
- Enough detail so that Mazda or I could reimplement

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  - Slides on resources page

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  "You will have to work day and night"

Class Discussion

Ryan Hatfield on auctions with time limits

Voting vs. auctions

- Auctions: maximize profit
  - result affects buyer and seller
- Voting: maximize social good
  - result affects all

Gibbard-Satterthwaite

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What about Clarke tax algorithm?

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Criterion of independence of irrelevant alternatives. If one set of preference ballots would lead to an an overall ranking of alternative X above alternative Y and if some preference ballots are changed without changing the relative rank of X and Y, then the method should still rank X above Y.

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Non-dictatorship. There should not be one specific voter whose preference ballot is always adopted.

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- Push-over: Rank someone higher to get someone else elected
  - e.g. in a protocol with multiple rounds

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