Autonomous Multiagent Systems

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Week 13, Thursday (11/21)

Any Questions?

Progress Reports

- Overall, quite good.
- Continue to improve your writing for the final report
  - Standards will continue to go up!
- Don't feel committed by what you've proposed

The tournament is going to be fun!!!!

A Few High-Level Comments

- Focus on the reader. Write something that would be easy to read.

- Stream-of-consciousness is *not* easy to read. Everything should be motivated by what comes before.

- Don't be afraid of putting in extra connecting, motivating sentences that might seem obvious to you.

- Don't use "obviously," though.

Bayes Rule

- You run a cancer clinic.
- 10% of people tested have cancer: $P(C) = .1$
- What are the chances a new patient he has cancer?
- You find out he smokes. Now what are the chances? $P(C|S)$
- Assume you have detailed information on people with cancer, but not those who don't.
- What more information do you need?

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- 80% of patients who have cancer smoke: $P(S|C) = .8$
- 50% of patients smoke: $P(S) = .5$

Bayes: $P(C|S) = \frac{P(C)*P(S|C)}{P(S)}$

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Student-led Discussion

How can we use agent modeling in TAC auctions to maximise utility?

Criteria

- must be real time — strategies in auctions change dynamically
- What else?

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Where do Models Come From?

Observation:

- Tambe and RMM: use existing model
  - No building a model
- Riley: classify, but with lots of hand-coded features
  - No prediction

What if we can't build a full model in advance?

- What are some incremental approaches for building a predictive model?

Surveys

- Need a volunteer
- Please take them seriously
- Helpful to me
- Helpful to next students
- Be as detailed and constructive as you can be
- What would you change (if anything)?
- Feel free to submit another on-line survey as well