

CS378
Autonomous Multiagent Systems
Spring 2005

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Week 11a: Tuesday, April 5th

Good Afternoon, Colleagues

Are there any questions?

Logistics

- Progress reports due at beginning of class
 - Attach your proposals

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- Guest lecture on Thursday: Greg Kuhlmann

Reading Overview — Vidal and Durfee

Recursive Modeling Method

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- etc.

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 - Could be computationally expensive

Types of models

Example: pursuit task

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Sub-intentional: Not rational

Intentional: Others use same model

Lessons

- Modeling can help
- There is a lot of useless information in recursive models
- Approximations (limited rationality) can be useful

Tracking Dynamic Team Activity

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- Assume agent is using a plan that you could use,
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- Act based on assumed actions of others

Class Discussion

Michael Lovitt on agent vs. user modeling

Where do Models Come From

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 - No building a model

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

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

Play me at RoShamBo

- Rock beats scissors
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- Would your end strategy change if I can?

Stackelberg Game

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		Action 1	Action 2
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Threats slides

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 - common payoff = search for pareto optimum
 - General sum is the interesting case:
 - Learning in an environment with other, unknown, independent agents who may also be learning
 - Need to do well against some set of agents, never too poorly, and well against yourself.