

**CS378**  
**Autonomous Multiagent Systems**  
**Spring 2005**

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**TA: Nate Kohl**

Department of Computer Sciences  
The University of Texas at Austin

Week 3a: Tuesday, January 31st

# Good Afternoon, Colleagues

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Are there any questions?

# Logistics

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- Programming assignment questions?

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  - Multiagent Systems – an overview
  - Another overview (optional)
  - Pushing Brooks' approach to MAS

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  - Free-form response

# Satinder Singh's Talk

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- Any reactions?

# Class Discussion: Jason Huie

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- Should we model robot learning after human learning?



# The Decision

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- reactive vs. deliberative (3 senses)

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  - No complex representation
  - No state at all (respond to current percepts)

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- multiagent reasoning?
- learning?

# Standard vs. State-based Agents

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It is worth observing that state-based agents as defined here are in fact no more powerful than the standard agents we introduced earlier. In fact, they are *identical* in their expressive power.

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- Standard agent:  $action : \mathcal{S}^* \mapsto \mathcal{A}$

# Reactive Agents (from the book)

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  - True of Brooks' "reactive" agents?

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Subsumption Architecture

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Subsumption Architecture

(journal article, page 2)