

CS344M

Autonomous Multiagent Systems

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Good Afternoon, Colleagues

Are there any questions?

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- Synthetic challenge paper "dated" = old?
- Offline skill learning - how?
- Hardware speedups: more on-line learning?

Logistics

- How did it go?

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- Next soccer assignment: communication

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- Next soccer assignment: communication
 - 1 more in C, then C++

Class Discussion

Aravind Gowrisankar on car-racing agents

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RoboCup Synthetic Agents Challenge

- Learning Challenge
- Teamwork Challenge
- Opponent Modeling Challenge

Learning Challenge

- early years – Offline individual, collaborative learning

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- then some online skill and collaborative team learning

Learning Challenge

- early years – Offline individual, collaborative learning
- then some online skill and collaborative team learning
- Open challenge – on-line adversarial learning
 - Especially during a single game

Teamwork Challenge

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- now, more flexible teamwork
 - plan decomposition – roles, play modes
 - executing team plans – ISIS
 - contingency planning – not so much

Opponent Modeling Challenge

- First: Build in models

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- Off-line review – statistical engines

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- Open challenge:
 - On-line tracking (Andou)
 - On-line strategy recognition

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- First: Build in models
- Off-line review – statistical engines
- Open challenge:
 - On-line tracking (Andou)
 - On-line strategy recognition
- Recent years – coach
 - Omniscient view
 - Standard language
 - Coachable teams