

CS344M

Autonomous Multiagent Systems

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Good Afternoon, Colleagues

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Are there any questions?

Logistics

- Programming assignments
 - How did it go?

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- Programming assignments
 - How did it go?
 - Assignment 3 is assigned

Pengi

- Penguin chases monsters in a maze
- Can kill them with ice blocks
- Monsters can kill penguin by touching it

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Group 1: Design a Pengi controller using subsumption

Group 2: Design a Pengi controller using 3T

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

- early years – hard-wired positions

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Teamwork Challenge

- early years – hard-wired positions
- 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