

Workshop W2 on AI in Adversarial Real-Time Games

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9 submissions, 7 accepted, 1 no-show

Thanks to all reviewers! Made our task easy.

Paper Topics

- Kiting
- Q-Learning in RTS games
- Incorporating Search Algorithms into RTS Games
- Adversarial Policy Switching
- A Data Set for StarCraft and Army Clustering
- Adversarial Planning in Multi-Agent Pursuit-Evasion Games

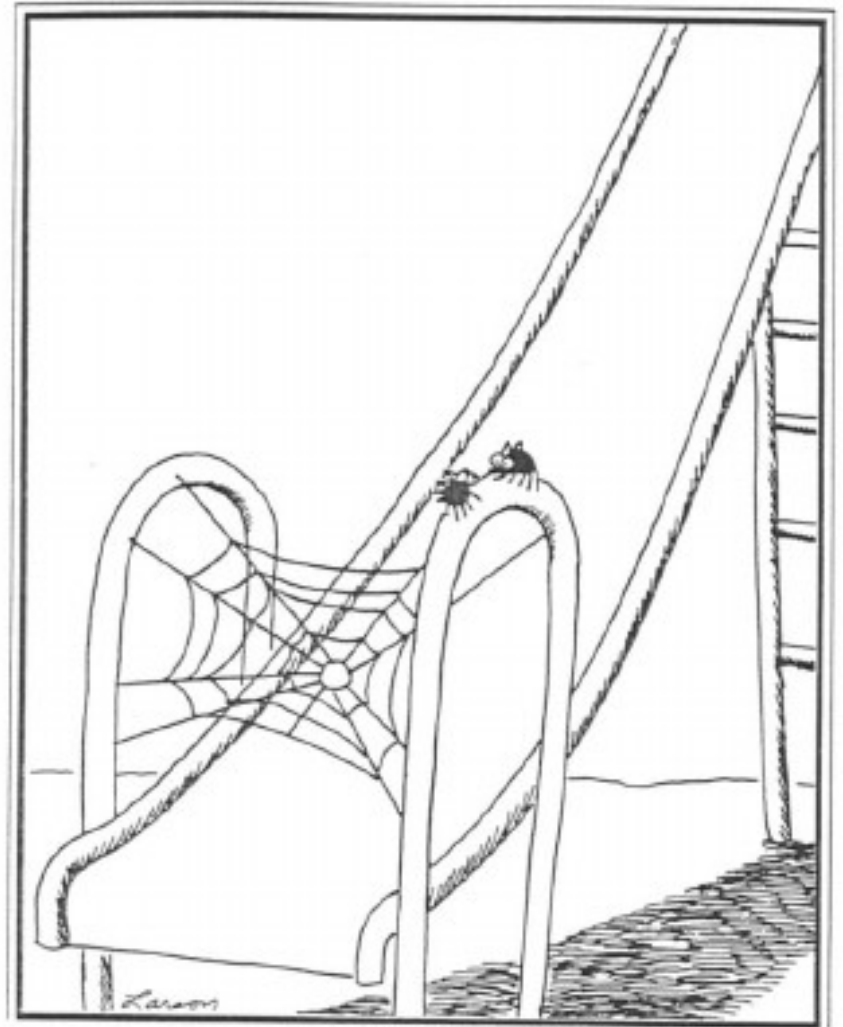
Program

- 3 paper sessions (2 x 35 minutes each)
- StarCraft competition overview +
4 man-machine games with commentary
(40 minutes)
- Group discussion (70 minutes)

Group Discussion Topics

In what ways is RTS AI research contributing to AI in general?
Applications?

- RTS in between real-world robotics and abstract (board) games
- **Solve problems like humans do using state and action abstractions! Hierarchical concurrent adversarial real-time planning, anyone?**
- Can we share insights with RoboCub, FPS, military simulation research?



"If we pull this off we'll eat like kings"

(Gary Larson, The Far Side)

Also Discussed ...

What are the biggest obstacles towards achieving professional RTS playing strength?

- Substantial entry barrier (researchers are still using Wargus)
- Higher level StarCraft API would make it easier to create new bots.
- AI needs to be aware of game goal of winning and look ahead: **simulation is essential**
- Search at multiple levels of abstraction
- Don't repeat computer Go history. Rather, embrace (global?) MCTS right from the start ?

and more ...

- How to attract more interest in RTS competitions ?
- RTS game AI benchmarks ?
- What about FPS AI research ?

...

Then the bus left for downtown, where we had a nice dinner @ Tai Pan ;-)