Soaring with Descent 3

http://ai.eecs.umich.edu/~soarbot

Russ Tedrake

Artificial Intelligence Laboratory
University of Michigan
1101 Beal Ave.
Ann Arbor, MI 48109
rtedrake@eecs.umich.edu



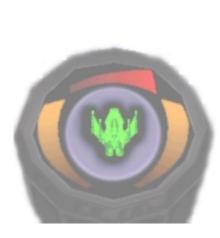




What's Descent 3?

- First person, space-shooter designed by Outrage Entertainment
- Very impressive graphics/physics engine
- Great existing game AI
- Multi-player







Challenges for Soar

- Requires fast and accurate decision making
 - Game AI typically runs every game loop, Soar runs independently
 - Multi-threaded interface using SocketIO
 - Causes Soar's actions to appeared delayed
 - More conservative productions







Challenges for Soar (cont.)

- Potentially overwhelming number of inputs (Designing Input and Output Links)
 - Competing not as game AI but as human player
 - Encapsulating a user's experience in IO
 - Efficient communication protocols







Acknowledgements

- Soar/Games Project Members
 - John Laird, Mike van Lent (Project Leaders)
 - Kurt Steinkraus, Josh Buckman, Damien Neff (Soar/Descent Interface)
 - Steve Houchard (parallel work on Soar/Quake)
- Outrage Entertainment





