

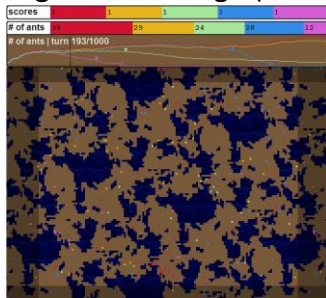
The Plan for Today

- Review Contest Questions
- The Post-Regionals Project

Post-Regional Project

- I have heard a rumor that motivation tends to drop after Regionals...perhaps this is slightly related to the fact that apparently it's tradition to write boring wiki pages about algorithms after Regionals?
- Anyways, me and the TAs wanted to find something that was
 - Fun
 - Not an insane amount of work, because we know you all have finals and projects coming due. But also not just trivial.
 - A change of pace

Post-Regional Project: Google AI Challenge (Ants!)



<http://aichallenge.org/visualizer.php?game=70093&turn=218>

Implementing an Ants AI

- There are provided tools that let you run your own contests and pit your ants against examples
- There are provided libraries that let you query stuff about the state of the world, and handle all the details of communicating your orders to the server
- There are sample implementations for almost every language you might be curious about – including Haskell, Go, Scala, C
- There are online tutorials to get you going (only for Java and Python...but converting them to the language of your choice is not difficult)

Official Project Requirements

1. Work on a team of 1-3
2. Your ants must at minimum:
 - a) Collect food
 - b) Explore the board
 - c) Attempt to capture hills
 - d) Do something to "band together" and attack other ants
3. Bonus points for Ants that:
 - a) Implement interesting AI techniques
 - b) Do well in the Final Class Ant Throwdown on the last day
 - c) Are written in an interesting language
4. The real ants contest starts on December 18th. I'm guessing competition will be intense, but I'm interested to see how we do.

← 1-3 are already done if you follow the tutorial

Before Next Class

- Decide on your teams
- Figure out how to get the Ants environment set up (instructions at aichallenge.org)
- Write ants that at least search for food (and if you're using Java/Python...go through the whole tutorial)
- Submit your code/teams via Blackboard before class. Just have everybody in the group submit the code.