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.

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.