Misc.

• Homework 1:
  — Pass/fail grading

• Paper presentation schedule
  — Dates ok?
  — Questions?

Turing test clarifications

• Male/Female imitation game versus Machine/Human imitation game.

• Asking a question most humans can’t answer; e.g., “What is the square root of π?”
Turing Test controversies

“Humans are not digital finite state machines but rather analog machines; thus machines will never be able to think like humans do.”

“Turing machines cannot solve the general halting problem. Therefore there are things humans can do that machines cannot do.”

“Abilities like imagination, improvisation, and innovation can’t be captured by a machine following rules.”

“Humans are more capable of randomness than machines.”

“Machines can’t feel emotion, which is an essential part of human-level cognition.”

“The Turing test cannot identify non-human intelligence (e.g., dolphins, chimps, etc.)

Problem-solving as search II
Simulated annealing (again)

• Example: Traveling Salesman Problem (TSP)

Simulated Annealing Algorithm on TSP
Homework 2

Game-Playing as Search
Alpha-Beta Pruning

Maximizing

Minimizing

alpha(3) >= beta(2)
so prune

Pruned
Mid-game example of minimax, alpha-beta pruning

More on team projects

• List of teams/projects so far