Weekly Blog Assignments

1 Week 1: The Turing Test

What would a machine have to do to convince you that it was intelligent? Due Aug 30, 11:59pm (250 words).

2 Week 2: Cybernetics

Please respond to the following prompt in 250 words or more: How are kittens, guided missiles, brains, and cities similar? How are they different? What should a unified science of these things study? Due Sept 3, 11:59pm (250 words).

3 Week 3: Dartmouth & Institutionalization

Is Advice Taker a cybernetic system? How would you compare it to Ashby's homeostat or Grey Walter's tortoise? What would Turing think of it? Due Sept 10, 11:59pm (250 words).

4 Week 4: The Golden Age

Is AI a science? If so, what is it the science of? If not, what is it? Due Sept 17, 11:59pm (250 words).

5 Week 5: Expert Systems, Startups & Industry

Is there knowledge a machine can never possess? Is intelligence possible without this knowledge? Refer, in your answer, to a passage (or passages) you think are worth discussing in class. Due Sept 24, 11:59pm (250 words).

6 Week 6: Japan & the 5th Generation Computer Project

You have now seen three different explanations of why Japan undertook the fifth generation computer project. Which one is true? Refer, in your answer, to a passage (or passages) you think are worth discussing in class. Due Oct 1, 11:59 (250 words).

7 Week 7: AI in the Popular Consciousness

What was something you found interesting in the movie? Think about how popular culture and science fiction take up and respond to elements of AI's past, present, and future. If you see a scene you think is worth discussing, write down its time code so we can review it in class. Due Oct 10, 11:59 (250 words).

8 Week 8: The Strategic Computing Initiative

Are we due for another "AI Winter?" Consider the various perspectives you have just read on how AI funding works. Refer, in your answer, to any passages you think are worth discussing in class. Due Oct 15, 11:59 (250 words).

9 Week 9: Artificial Life

Do artificial life forms "really" evolve, or do they only simulate evolution? Could a computer simulation ever really be alive? Refer, in your answer, to any passages you think are worth discussing in class. Due Oct 22, 11:59 (250 words).

10 Week 10: Embodiment

Think of a plan you made recently, either alone or with others, that you either followed through on or didn't. Describe the whole sequence of events. Be sure to explain why you (and others) acted as they did. Do not, under any circumstances, use the word "plan" or describe the mental act of planning! Due Oct 30, 11:59 (250 words).

11 Week 11: Emotion & Gender

What is the most important emotion for a machine? Does it depend on their gender? Due Nov 5, 11:59 (250 words).

12 Week 12: Robot & Statistical Revolutions

Google translate a sentence (whether yours or someone else's) into another language (whether you know it or not), and then back to English. Repeat until the meaning changes. Try to speculate about why the computer made the changes it did. What knowledge would the computer need to have to translate it correctly? Due Nov 12, 11:59 (250 words).

13 Week 13: Consumer AI

What can an AI in Samantha's position, deeply embedded in Theodore's life, learn about human beings that NELL (Never Ending Language Learner) cannot, no matter how long she crawls the

web? What are the possibilities for AI that this affords? What are the risks or limitations? Due Nov 19, 11:59 (250 words).

14 Week 14: Deep Learning & AGI

In light of your obvious qualifications as an expert on the history of AI, you have been appointed chief AI visionary at the non-profit research thinktank OpenAI. It has been 60 years since AI was first imagined at Dartmouth. Lay out your own roadmap for the next 60 years of AI research. Be specific: researchers can't implement vague abstractions. What are the important milestones for AI? What kinds of abilities will AIs need to accomplish those milestones? Where can AIs learn those abilities? What kinds of technologies can support that learning? Where can historical AI provide useful inspiration or cautionary tales? You can extend Mikolov et al.'s roadmap, or you can change it. For your first blog post, you came up with a working definition of the goal of machine intelligence. Does that vision still hold, or has it changed? Due Nov 26, 11:59 (250 words).