

## Protocol (Aug 25, 2021):

By Emma Brandes

This is the fourth day of Artificial intelligence.

### Sources:

- Whiteboard
- Lecture on GitHub
- In class notes

### Housekeeping:

Wednesday, August 25th we talked about the four approaches for creating a machine. We only made it through the first 3 which were; Acting humanly, thinking humanly, and thinking rationally.

	Thought/ Logic	Behavior/ Action
Humanity	Cognitive modeling	Turing Test
Rationality	Laws of Thought	Rational Agents

### Questions:

Questions asked:	Class Answers:
Why would robots take over nursing?	They would make fewer mistakes. Example; giving medication.
Would human nurses or robot nurses do better?	Robots will do better, because they can lift more than humans and make less mistakes. But I think humans show more empathy than a robot would.

### Grace the robot:

First impression: female, large eyes, sad, skinny, doesn't look confident.

- Intended as a support for medical professionals rather than a replacement, says Hanson Robotics (Cairns, R (19 Aug 2021). Meet Grace, the ultra-lifelike nurse robot. Online: [cnn.com](https://www.cnn.com).)

### AI blogs:

Three players in the AI world:

1. Google: most scientific/ complex player
2. Microsoft: pushes their products
3. Amazon: uses sagemaker to give people free information about how to develop machine learning models.

## Session Topic/ Lecture: What is AI

- Four Scenarios: Human, Behavior, Rational, thought  
Friday the main idea we talked about was acting rational.

Combination Approach	Some behaviors of humans
Constructivist	general philosophy; most if not all the world around us is constructed by us Upper right quadrant.
Doing the right thing	Must have some form of algorithm that makes the robot do the right thing. For examples; ask questions, greetings component.
Standard model	Take the best possible action in a situation.
Control Theory	Objective function overtime.

**Major issues:** Serious limitations because they're quite vague.

- Bounded rationality: has an upper limit for humans, ex: from 1985
  - AIMA: "For perfect rationality, the computational demands are just too high."  
(Class lecture)
- Value alignment problem: the mechanical turk 17-18 century beat people in chess with a machine (he didn't actually play) but there was a small person who was sitting inside the machine who was very good at chess who was making the moves.
  - AIMA: "The values or objectives put into the machine must be aligned with those of the human." (class lecture)

### Robot laws: "I, Robot":

1. A robot may not injure a human being or, through inaction, allow a human being to come to harm.
2. A robot must obey the orders given it by human beings except where such orders would conflict with the First Law.
3. A robot must protect its own existence as long as such protection does not conflict with the First or Second Law.

**Next class (Monday 30th):** Find pros and cons for each of these approaches.

## Summary View:

Overall this specific class was about learning what AI is and the different approaches to AI. Also we talked about the AI presentations and how they are to be done individually, and the AI application can be done as a team or group. We also talked about how to make our other classes work in tandem, which means using work from other classes or classes you've already taken to help with the presentations and how AI might be applied to those classes.