



Welcome!

Machine Learning Decal

Hosted by Machine Learning at Berkeley

Agenda

Who are we?

What is Machine Learning?

Class Logistics

Getting started

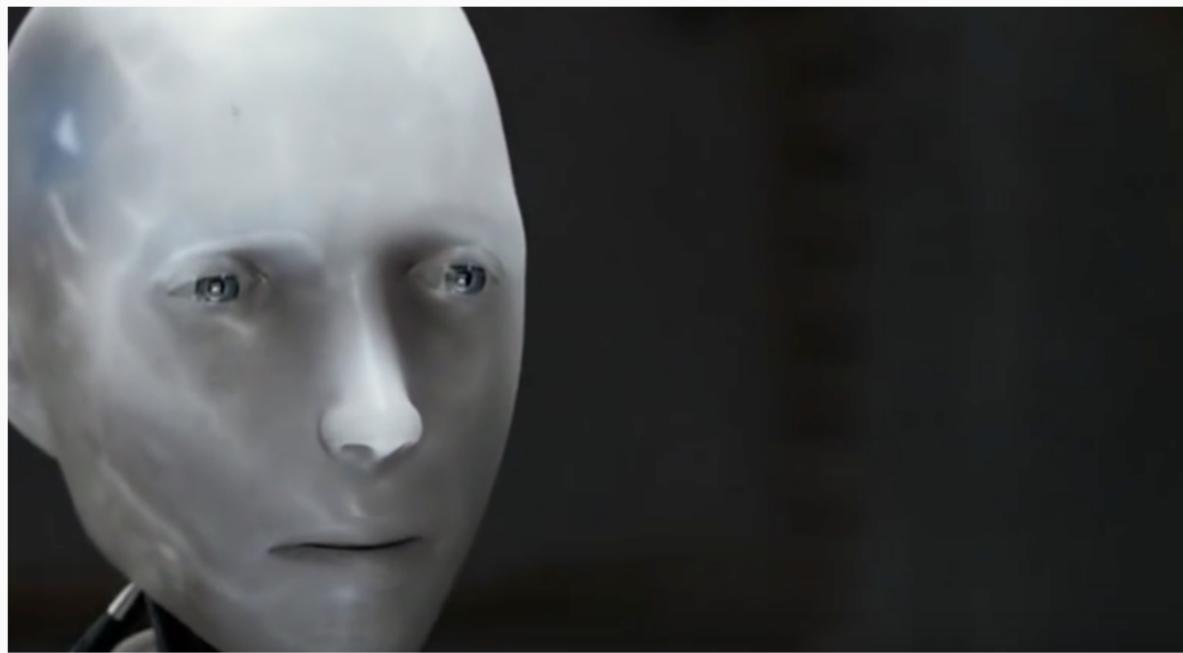
Who are we?

Machine Learning @ Berkeley Education Team



What is Machine Learning?

Age Old Question



Can AI compose music?



Can AI paint a canvas?



FAKE NEWS!



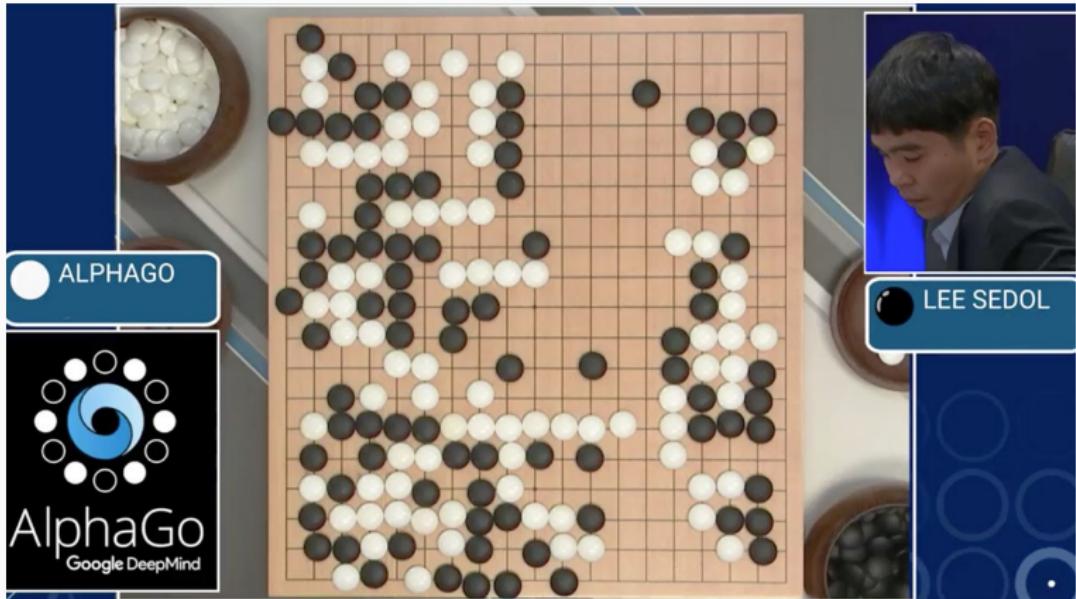
Original Video for Input Speech

Our Result

Pose tracking!



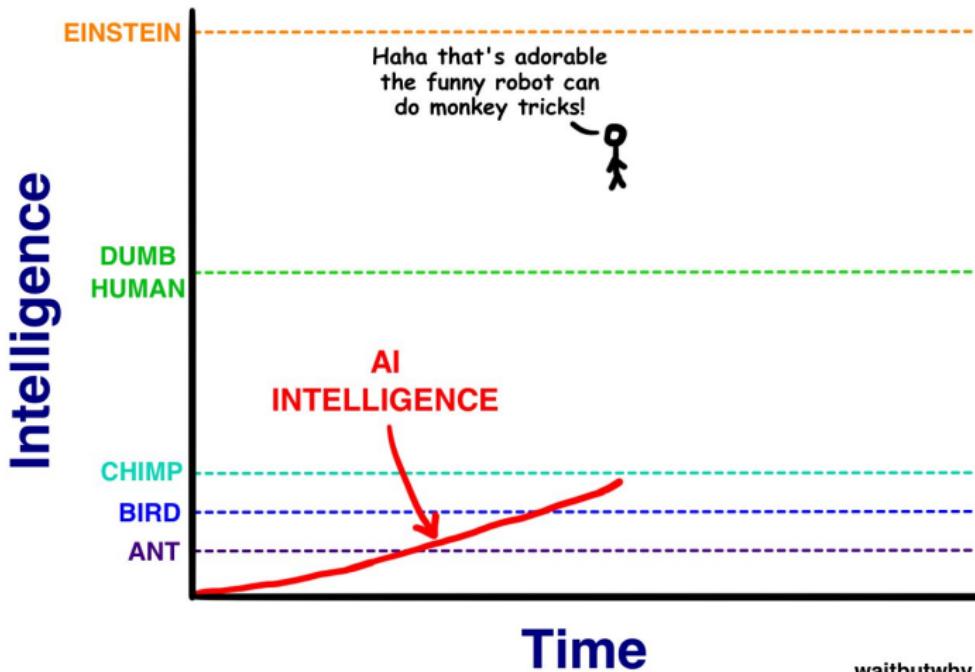
Superhuman reasoning



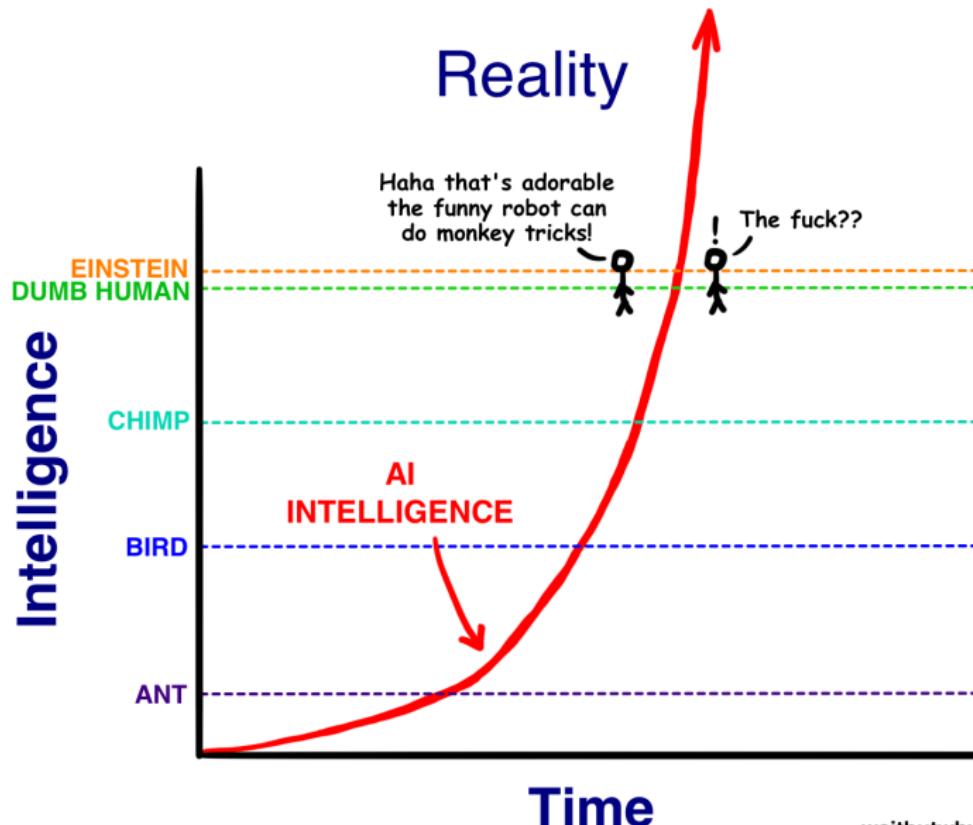
Selfdriving Cars



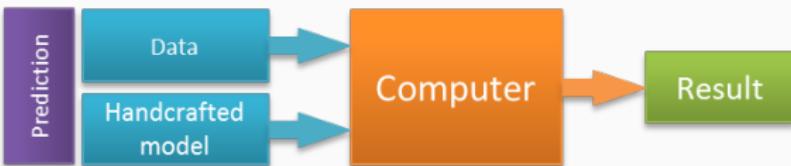
Our Distorted View of Intelligence



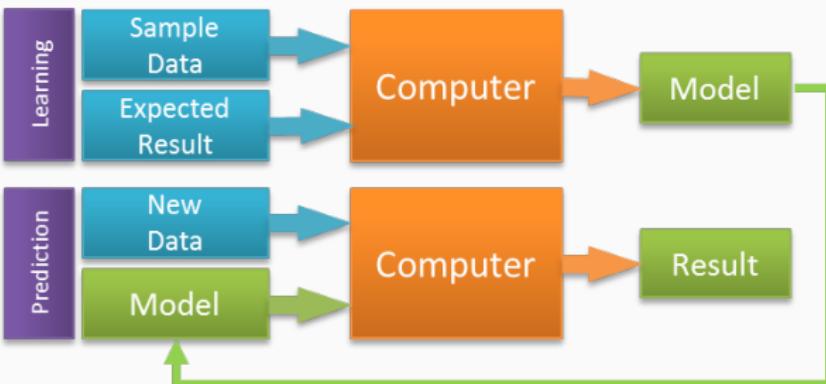
What intelligence is actually like

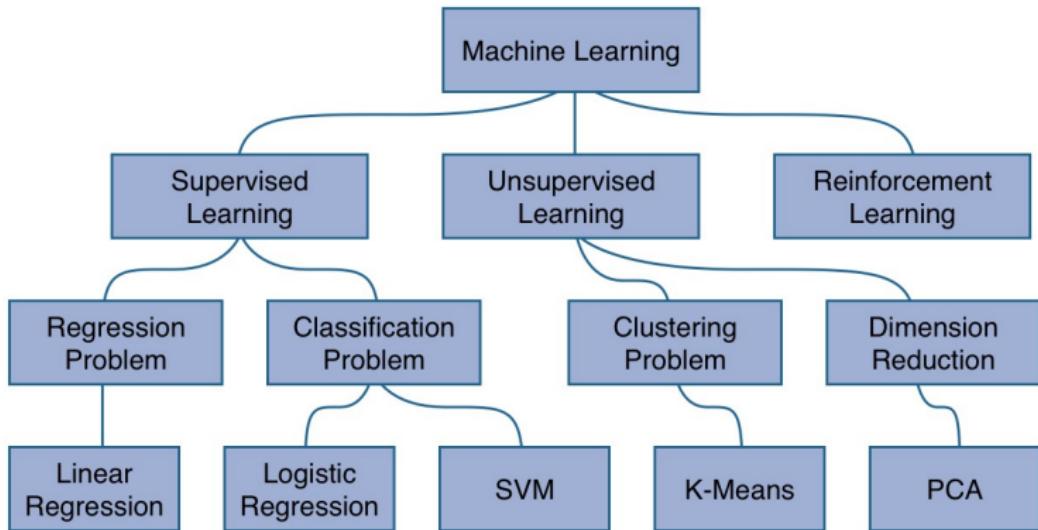


Traditional modeling:



Machine Learning:





Class Logistics

Goals:

- Understanding of the major concepts in machine learning
- Understanding of the tradeoffs between different approaches (what do I use when and why?)
- Ability to implement various techniques to solve ML problems

How we accomplish this:

- Lecture (2 hrs/week) - theoretical intro to various techniques, along with demonstrative demos
- Projects/homeworks (3-6 hrs/week) - practice implementing different models on different datasets

- Some of you here are in the class, others on the waitlist
- If you wish to be enrolled, you ***must*** show up to the first 2 weeks of class. Including waitlist people. Else you will be dropped (either from the class or from the waitlist).
- **Fill this out right now so you don't get dropped!:**

<https://tinyurl.com/day1mld>

Join Piazza: piazza.com/berkeley/spring2018/cs198082
All communication will be through Piazza.

Join Gradescope: 9YV5PV

Clone the github: <https://github.com/mlberkeley/Machine-Learning-Decal-Spring-2018>
All projects/homeworks released here. Also contains lecture materials.

- Attendance is mandatory and will be taken at every lecture
- You may miss up to 3 classes [not including first 2 classes]
- After your 3rd missed day of class, you will automatically be assigned a no pass

Yes there are grades

- 40% Homework
- 60% Projects
- Automatic "no pass" for insufficient attendance
- Remember you only need a 70% overall to pass

- 5 Homework Assignments
 - Work in groups of 3-4
 - Assigned in between projects
 - 1 week timeline
- 3 Projects
 - Roughly one project per month
 - Will give you experience manipulating, analyzing, and modeling data
 - 2 week timeline

- Each assignment will have 1 week late turn in period
- Small penalty for turning in late
- No submissions allowed after late turn in period over!

Homework 1 is out NOW, due next Thursday (in one week)!

Location for all: Data Science Nexus (Moffitt Library 1st floor)

Neel (conceptual only): Wednesdays 4-5pm

Rohan: Tuesdays 1-2pm

Additional OH found on Piazza thread!

Got Questions?



During lecture:

- Raise your hand!
- Ask on the lecture questions thread on Piazza!

Outside lecture / about anything else:

- Please don't email
- PIAZZA IS YOUR FRIEND!!!

Getting started

Let's get started!



- go to
github.com/mlberkeley/Machine-Learning-Decal-Spring-2018
- clone repo if you have git installed
- navigate to lecture 1
- let's get started!!!