CS 5100: Foundations of AI
AI Accomplishments

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> works pretty well
Speech to text

Siri.
Your wish is its command.

Siri lets you use your voice to send messages, schedule meetings, place phone calls, and more. Ask Siri to do things just by talking the way you talk. Siri understands what you say, knows what you mean, and even talks back. Siri is so easy to use and does so much, you’ll keep finding more and more ways to use it.

▶ works kind of well
Question answering

- 2011: beat the human world champions of the day
Face detection

- Face detection used to be a really hard problem. Now, your phone does it...

Person detection

- Person detection used to be a really hard problem...

Object detection

- this used to be hard too...

Stanley

- won the 2005 DARPA desert grand challenge
- drove 150 miles on roads in the Mojave desert autonomously
- key constituent technologies: machine learning, planning, vision, robotics

Image: Stanford University
Google self-driving car

- currently under development
- there’s a big team at Google working on it right now.
- will it succeed? who knows!
- key constituent technologies: machine learning, planning, vision, robotics
BDI Atlas

- https://www.youtube.com/watch?v=mclbVTIYG8E
- really impressive walking control

Key constituent technologies: adversarial search, machine learning.
Other success stories

- airline routing
- map route planning
- medical diagnosis
- web search
- spam classification
- fraud detection
- ad placement/marketing