

# WATSON



# Who is Watson?

- ▣ Watson is an artificial intelligence computer system capable of answering questions posed in natural language.



# What does Watson Know?

- ▣ Name some of the references you expect to find stored in Watson's memory banks.
- ▣ The entire "World Book Encyclopedia."
- ▣ Wikipedia.
- ▣ The Internet Movie Database.
- ▣ Much of The New York Times archive .
- ▣ The Bible.
- ▣ And much more...

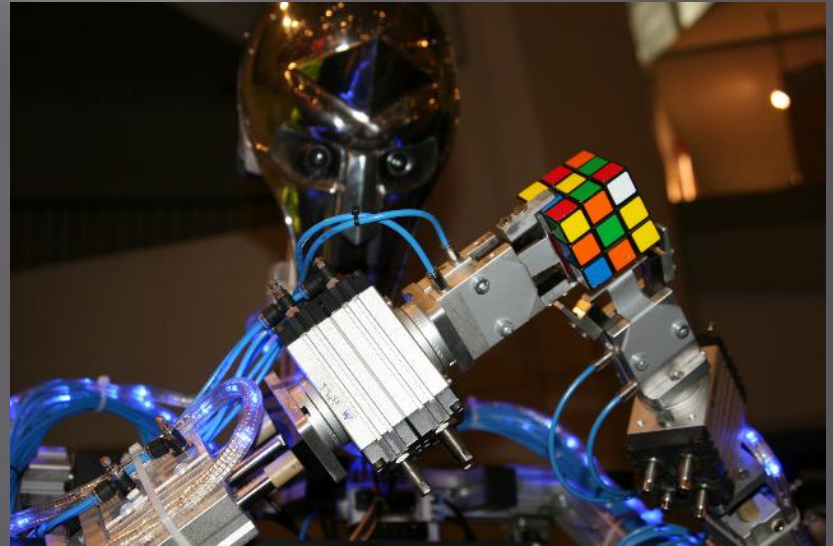
# Discussion Questions

- Do you believe that humans will ever build robots that are smarter than us? Why or why not?



# Discussion Questions

- ▣ Why do you think the engineers behind the Watson project are often “surprised” by Watson’s answers to questions?
- ▣ What does that tell you about the complexity of Watson?



# Discussion Questions

- ▣ Why might elements of language like puns and wordplay be especially hard concepts for a computer to grasp?



# Why would it be hard for a Computer to Understand Speech

- Language presupposes knowledge about the world
- Language only reflects the surface of meaning
- E.g. Headline Ambiguity:
  - Iraqi Head Seeks Arms
  - Local high school dropouts cut in half
  - British Left Waffles on Falkland Islands

# Real-World Applications of Computational Linguistics

- ▣ Spelling Suggestions/Corrections
- ▣ Grammar Checking
- ▣ Synonym Generation
- ▣ Information Extraction
- ▣ Text Categorization
- ▣ Automated Customer Service
- ▣ Speech Recognition (limited)
- ▣ Machine Translation



# Discussion Questions

Watson Cannot process speech yet, but if it could, do you think it is ok for a machine to understand much of what you say, even if you are not talking to it?



# Discussion Questions

- ▣ If you were the head of IBM, what challenge would you take on next? Which problems in the world can be solved with super-smart computers?



Further comments  
and questions? :)