

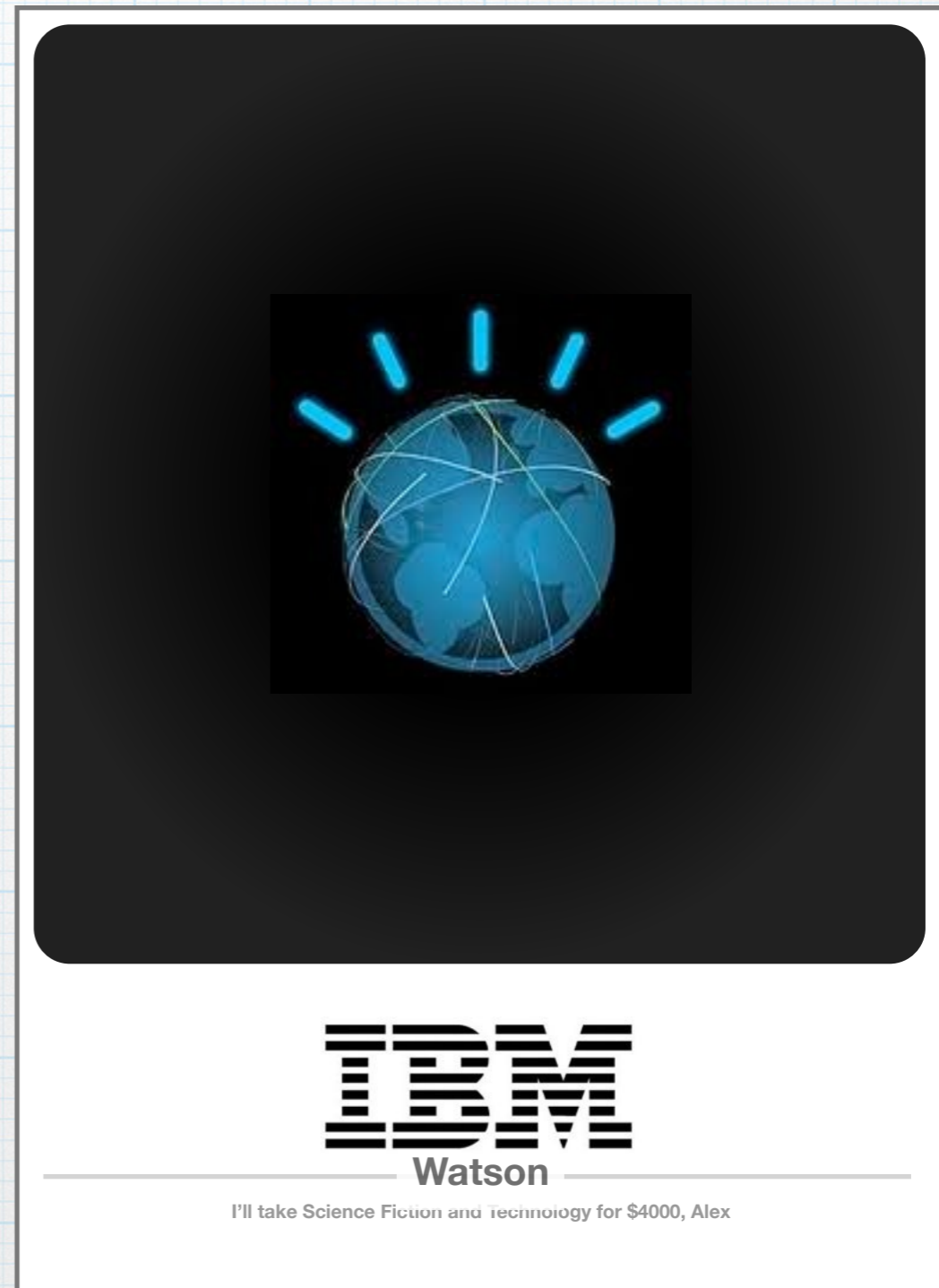
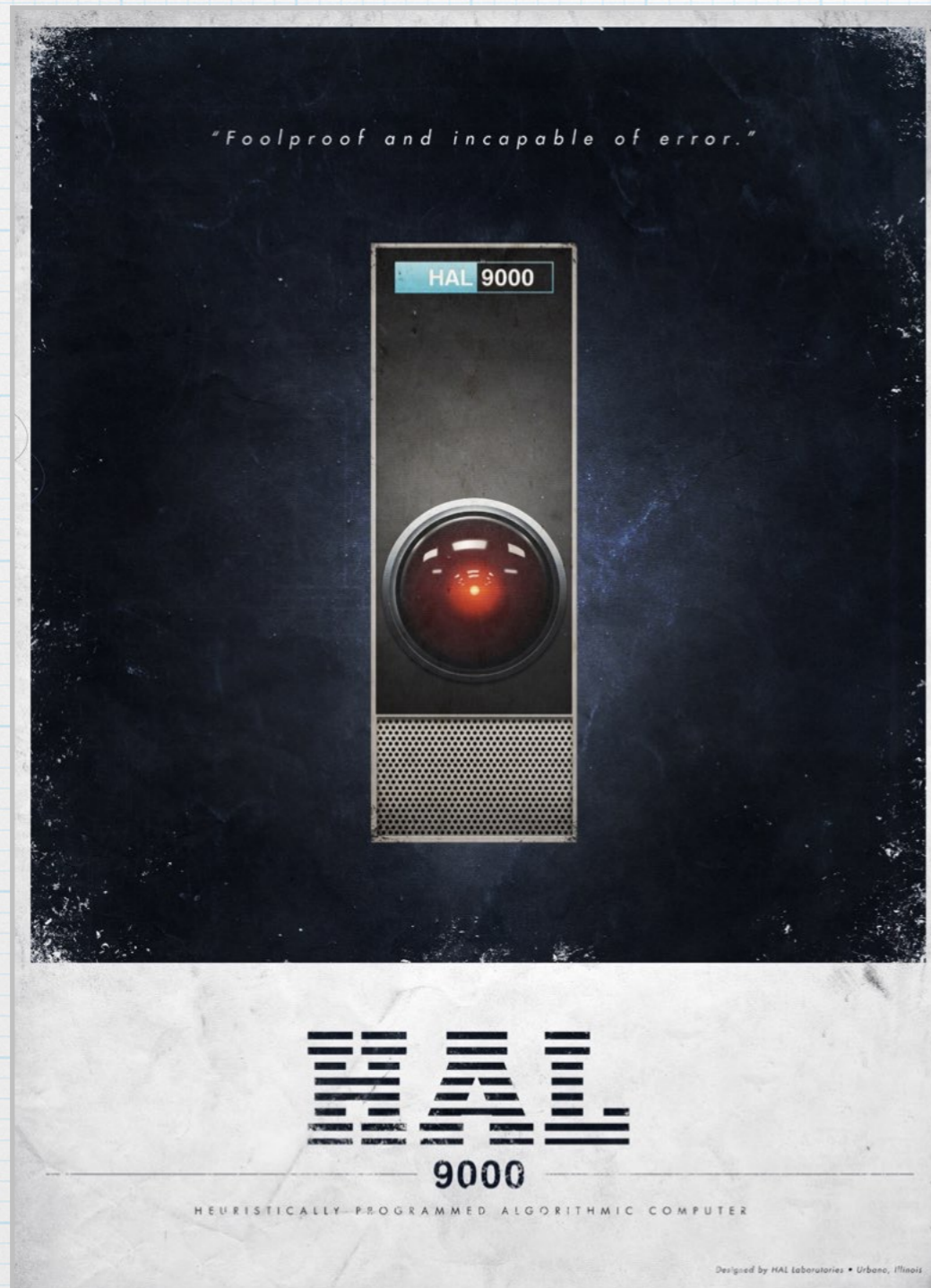
From HAL to Watson

Early Science Fiction Predicted Modern Technology

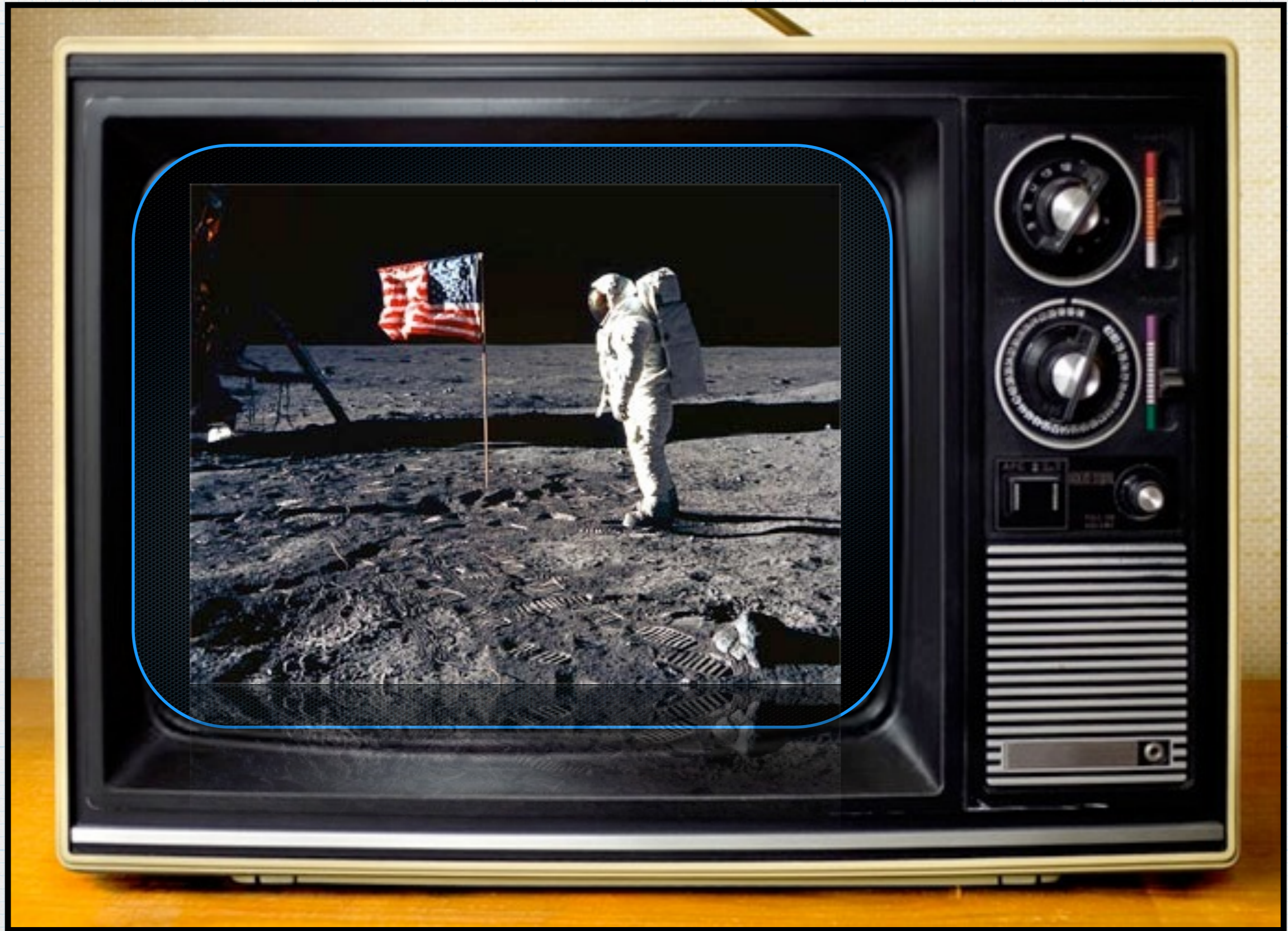


by
Alan G. Labouseur
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From HAL to Watson



From HAL to Watson



From HAL to Watson

HAL

2001 A Space Odyssey - 1960s

- ✦ Powerful but paranoid
- ✦ Natural Language Processing
- ✦ Speech recognition and synthesis
- ✦ Data analysis and reasoning
- ✦ Chess playing



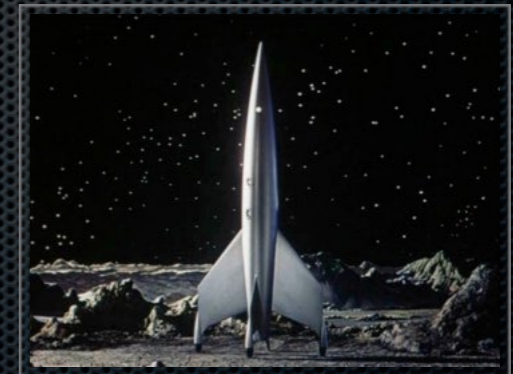
From HAL to Watson

Space Travel

Destination Moon - 1950s

2001 A Space Odyssey - 1960s

- ✦ G-forces, single stage rocket, the silence of space.



- ✦ Artificial gravity through rotation.



From HAL to Watson

SAGE

IBM, MIT, Burroughs - 1960s



Lost in Space - 1960s



From HAL to Watson

Enterprise Computer

Star Trek - 1960s

- ✦ Natural Language Processing
- ✦ Speech recognition and synthesis
- ✦ Data analysis and reasoning
- ✦ Three-dimensional Chess playing
 - ▶ Should be able to beat Spock.



From HAL to Watson

Matter / Antimatter

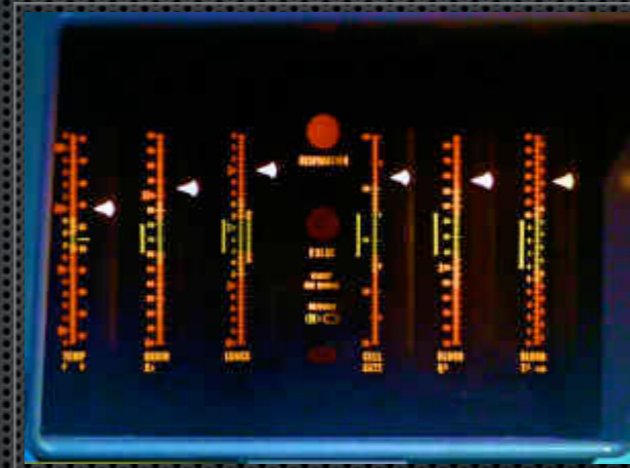
- ✦ 1960s - Star Trek's fuel for the warp core.



- ✦ 2010s - Anti-hydrogen created and briefly stored at CERN's Large Hadron Collider.

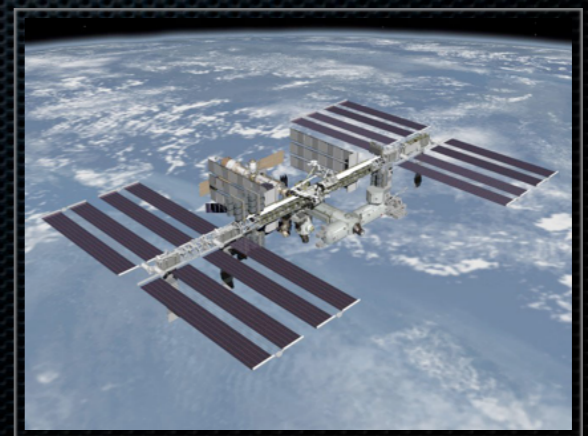
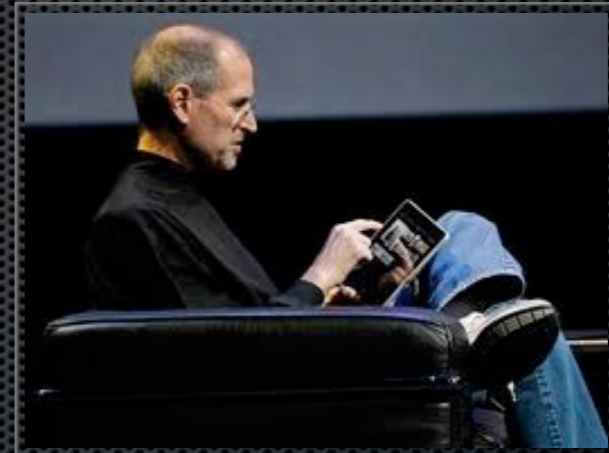
From HAL to Watson

More Star Trek → today



From HAL to Watson

More Star Trek → today

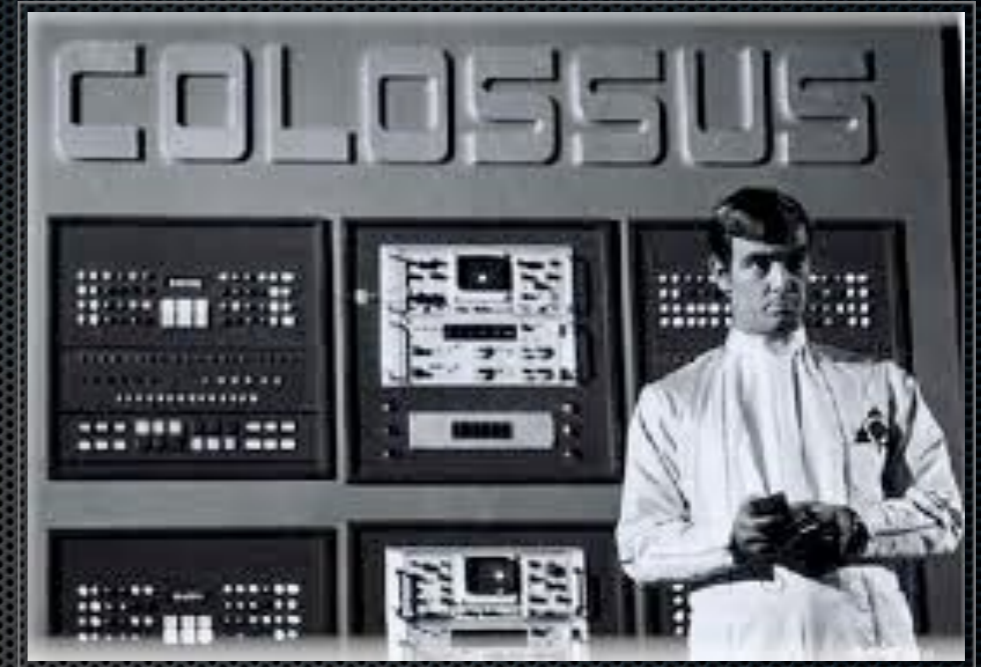


From HAL to Watson

Colossus

Charles A. Forbin - 1970s

- ✦ A computer that ruins the lives of the people around it, violates their privacy, and makes them paranoid.
- ✦ That could never happen, right?
- ✦ What could possibly go wrong?



From HAL to Watson

Identity and Privacy

- ✦ Blade Runner - 1982
 - ▶ Uncertain Identity
 - ▶ What does it mean to be human?
- ✦ A Scanner Darkly - 2006
 - ▶ Variable Identity, Ubiquitous spying, Paranoia



From HAL to Watson



Hunter/Killer Drones

Terminator - 1984

- ✦ Then: Dystopian future of aerial Hunter-Killer drones controlled by machines and used to kill people.
- ✦ Now: Aerial Hunter-Killer type drones controlled by people (for now, see Colossus) used to kill people.



From HAL to Watson

Education

Starfleet Academy and Marist . . .



. . . producing leaders of the future.

From HAL to Watson

HAL

2001 A Space Odyssey - 1960s

- ✦ Powerful and paranoid
- ✦ Natural Language Processing
- ✦ Speech recognition and synthesis
- ✦ Data analysis and reasoning
- ✦ Chess playing



From HAL to Watson

Watson

IBM Research - 2011



- ✦ Powerful and not paranoid (I hope)
- ✦ Natural Language Processing
- ✦ Speech recognition and synthesis
- ✦ Data analysis and reasoning
- ✦ Successor to chess-playing Deep Blue