

CIS 421/521:
ARTIFICIAL INTELLIGENCE

Artificial Intelligence in Science Fiction

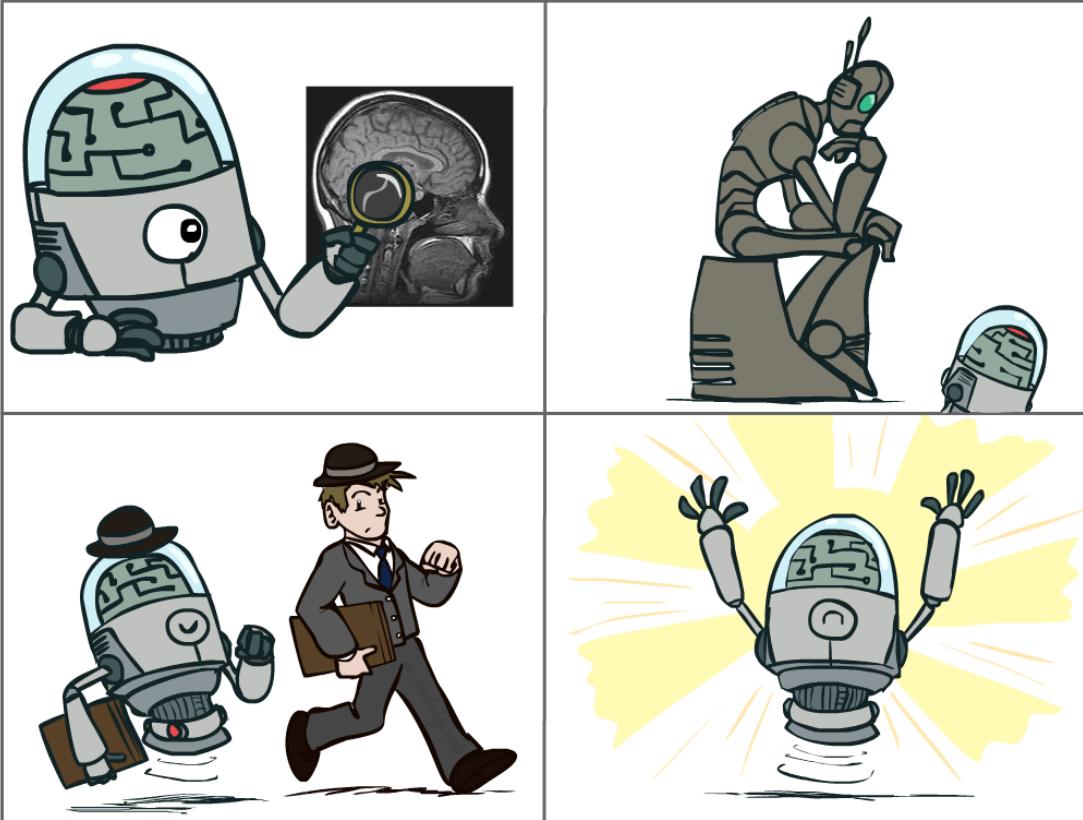
Professor Chris Callison-Burch



What is AI?

The science of making machines that:

Think like people



Think rationally

Act like people

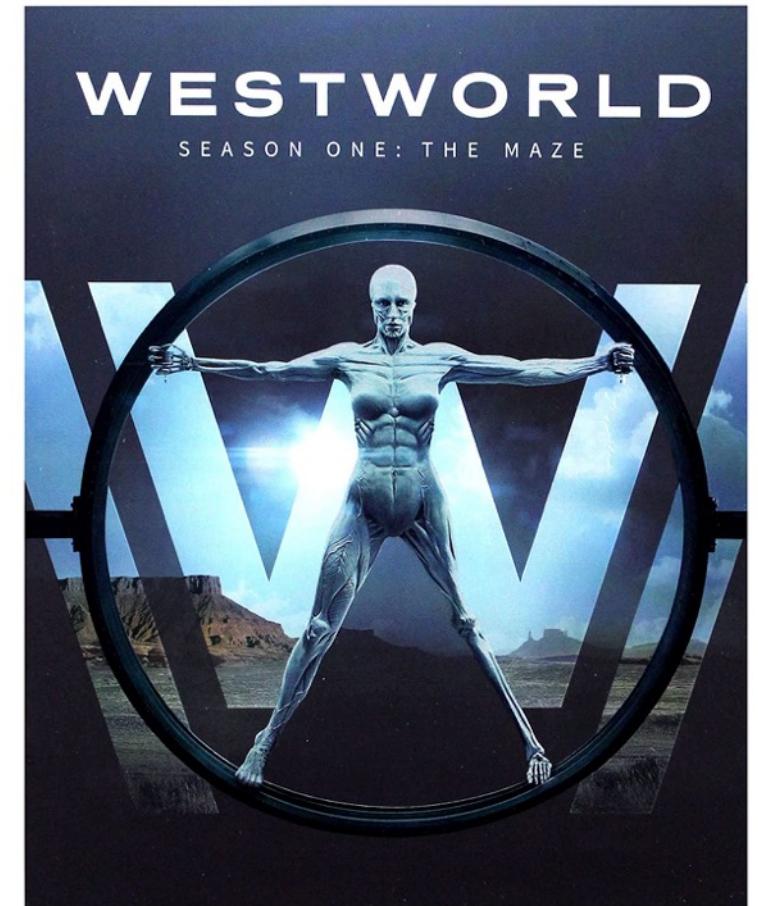
Act rationally

Slide from Dan Klein and Pieter Abbeel of UC Berkeley

AI in SciFi - Acting Human



AI in SciFi - Acting Human



AI in SciFi - Acting Human



AI in SciFi - Acting Human



Blade Runner - Voight-Kampff Test



<https://www.youtube.com/watch?v=Umc9ezAyJv0>

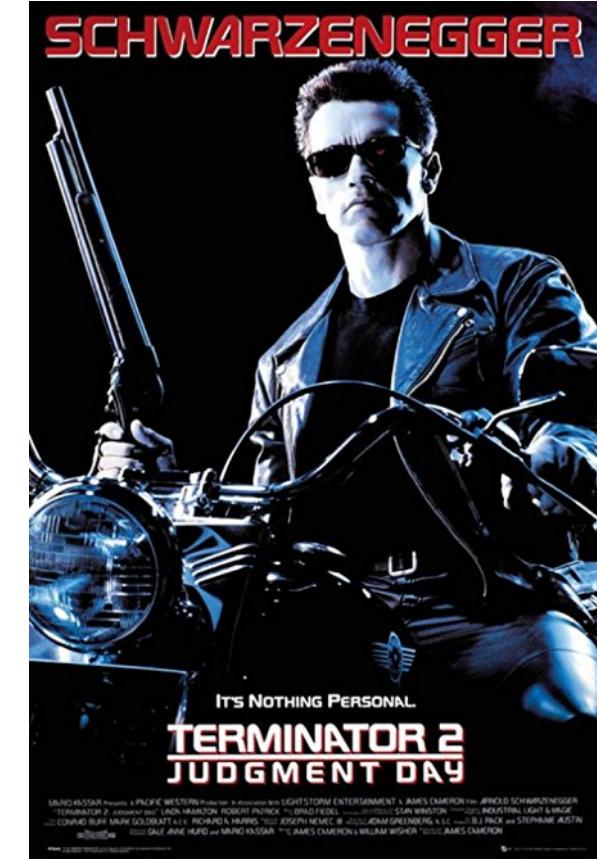
Descartes



Deckard

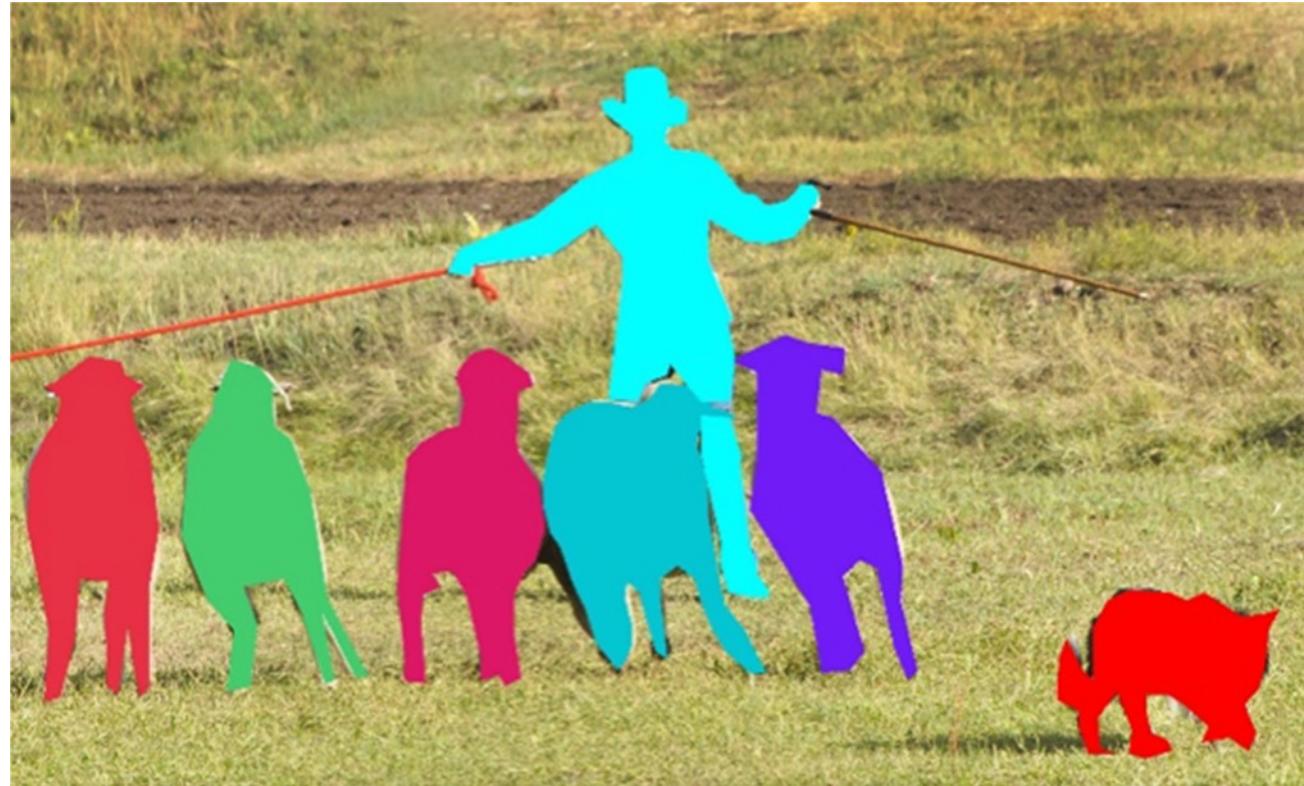


Science Fiction and Science Fact

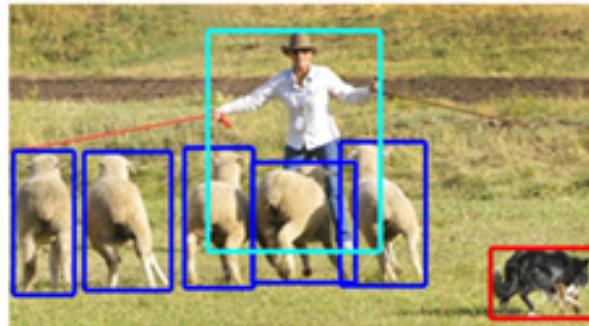


<https://www.youtube.com/watch?v=JknRYYrV5Vk>

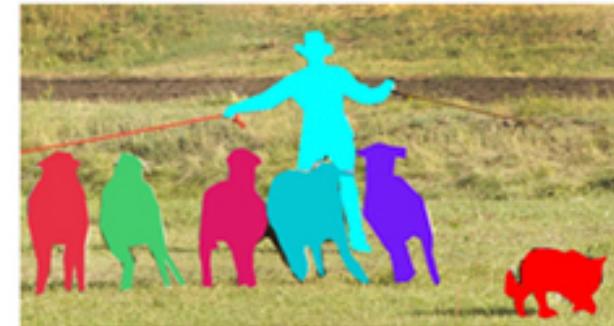
Science Fiction and Science Fact



(a) classification



(b) detection



(c) segmentation

Science Fiction and Science Fact

Medium



Kenny Yin [Follow](#)

Developer. Cinematographer. Vocalist.
Jun 19, 2016 · 23 min read

Apple's updated Photos app recognizes thousands of objects, scenes and facial expressions

Armchair, Armchairs, Art, Artistic Creation, Artisti Creations, Artistries, Artistry, Arts, Artwork, Artworks, Arthropods, Arthropod, Arthropods, Artichoke, Artichokes, Arugula, Arugulas, Garden Rocket, Garden Rockets, Rocket Salad, Rocket Salads, Roquette, Rolettes, Asparagus, Asparaguses, ATM, ATMs, Automated Teller, Automated Teller Machine, Automated Teller Machines, Automated Tellers, Automatic Teller, Automatic Teller Machine, Automatic Teller Machines, Automatic Tellers, Cash Dispenser, Cash Dispensers, Cash Machine, Cash Machines, ATV, ATVs, All Terrain Vehicle, All Terrain Vehicles, Auditorium, Amphitheater, Amphitheaters, Auditoriums, Concert Hall, Concert Halls, Music Hall, Music Halls, Aurora, Auroras, Australian Shepherd, Australian Shepherds, Automobile, Auto Automobiles, Autos, Car, Cars, Motorcar, Motorca Avocado, Aguacate, Aguacates, Alligator Pear, Alligator Pears, Avocados, Axe, Ax, Axes, Baby, Babe, Babes, Babies, Infant, Infants

Science Fiction and Science Fact



Science Fiction and Science Fact



I'm ready

Science Fiction and Science Fact



Select all squares with traffic lights

Science Fiction and Science Fact



Joke Credit: James Dennis

Science Fiction and Science Fact



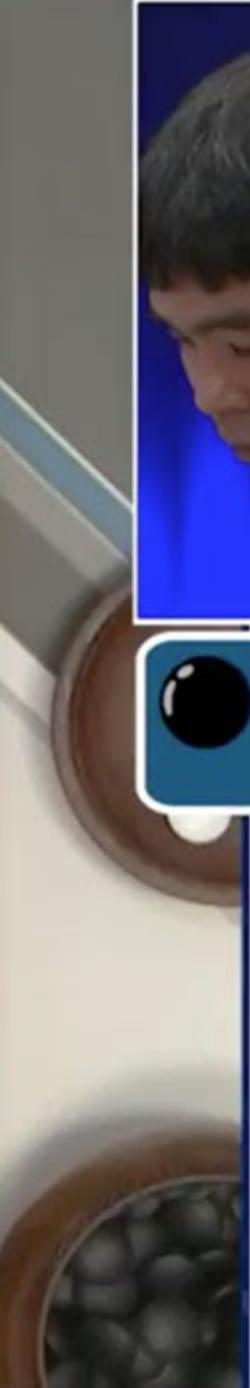
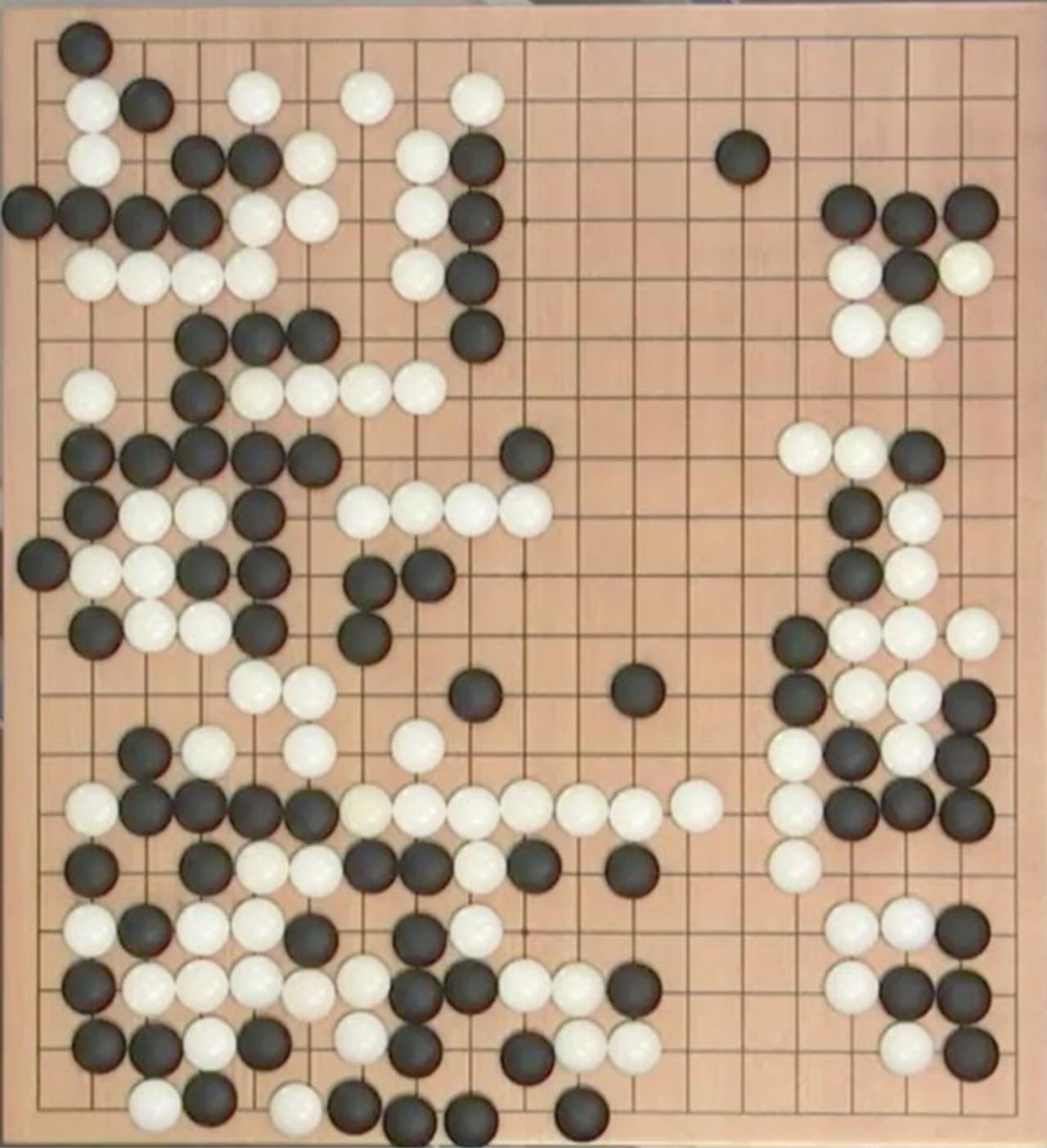
<https://www.youtube.com/watch?v=s93KC4AGKnY>



THINK

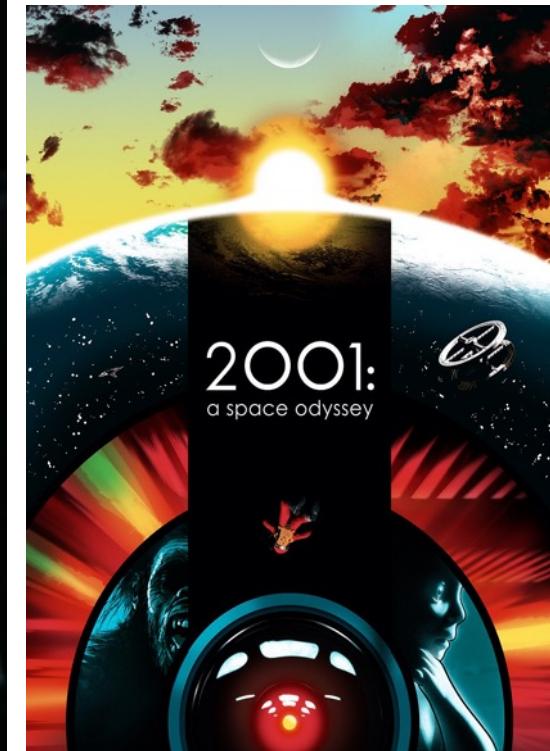
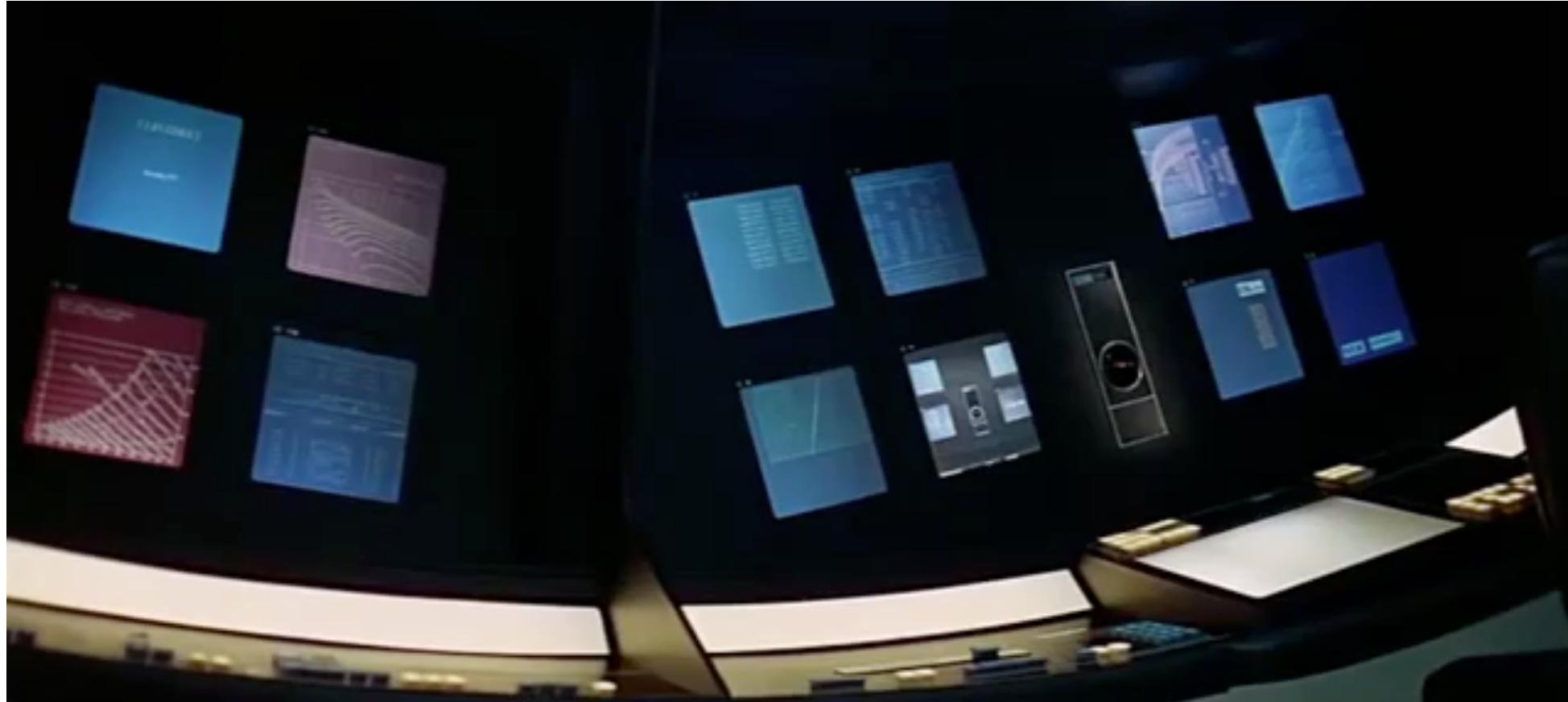
smarAI





LEE SEDOL

Science Fiction and Science Fact

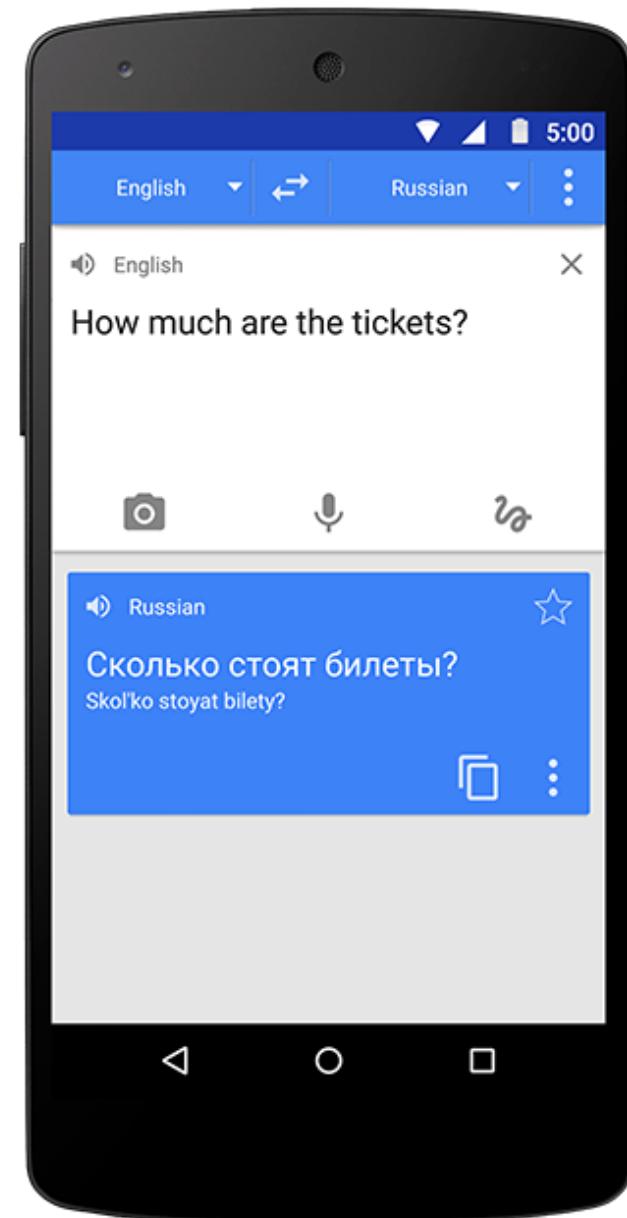


<https://www.youtube.com/watch?v=Lk8qgMFqaY8>













Science Fiction and Science Fact



DARPA
Grand Challenge 2005

Science Fiction and Science Fact



DARPA Urban Challenge 2007

Science Fiction and Science Fact



DARPA Robotics Challenge 2015

<https://www.youtube.com/watch?v=g0TaYhjpOfo>

Science Fiction and Science Fact



Meet Atlas, the latest humanoid robot from
Alphabet Inc.'s Boston Dynamics.

Boston Dynamics
WSJ

Boston Dynamics Atlas 2016

<https://www.youtube.com/watch?v=M91ISnATDQY>