# An Introduction to Artificial Intelligence

Through the works of Alan Turing, Dr. Gunkel, and The Radiolab By Roger Lou

# The Academic Approach to Computers





# CMC



"On the Internet, nobody knows you're a dog."

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#### Computer Mediated Communication

- How computers were viewed
  - Computing Devices
  - Then tool for communication
- Computers are technology
  - An extension of humans to help with efficiency

#### From Medium to The Other



## The Evolving Nature of Computers

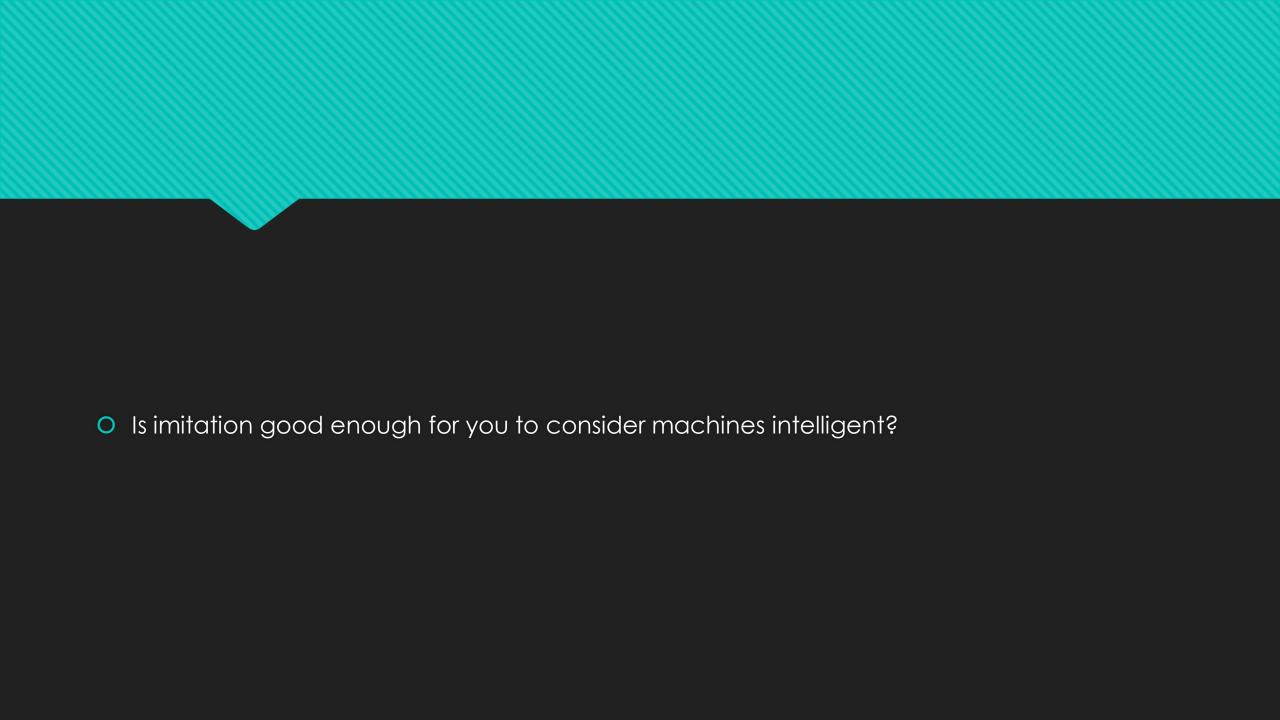
- Old operating assumption = Computer mediated communication = human to human
- 51% of all web traffic is nonhuman
- Computers can now respond with their own messages as opposed to human to human commnucation
- Spam Bots a real example of computers to human interaction

#### The Imitation Game

- Alan Turing's Imitation Game
  - O A different way of asking "Can machines think?"
  - Can machines pass for human
  - O If computers can simulate humans, they should be considered intelligent
    - O Turing requires a 30% success rate of the computer fooling participants

## The Imitating Machine Communicates

- Why is communication so integral to the judgment of intelligence?
  - Turing's Assumptions of Intelligence
    - O Intelligence is not directly observable. Communication is deemed a sign of intelligence.
    - O Communication is a product of intelligence regardless of what's going on in the processor.
- Naysayers Chinese Room Real mental capacities are different from simulations of those capacities. Simulation is not duplication.



#### Joseph Weizenbaum and ELIZA

- 1966, Weizenbaum creates ELIZA
  - Searches for keywords and reflects them ALA Rogerian Therapy
  - Converses with people and engages speakers
  - Caused Weizenbaum to flip his opinion of Al
  - Machine learning
  - O Cleverbot Rollo Carpenter

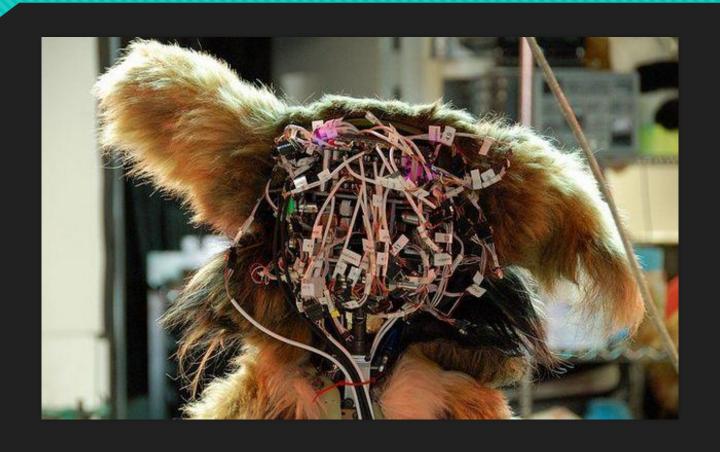
#### Radiolab

- O Robert Epstein
  - O Divorced in 2006 started online dating after divorce
  - Chatting with Illyana until red flags
  - And it happens again

# Furby – Emotional Turing Test



- Caleb Chung wanted to make a toy kids could bond to.
  - O How do you maximize a kid's time and bond with a toy? Make it seem alive.



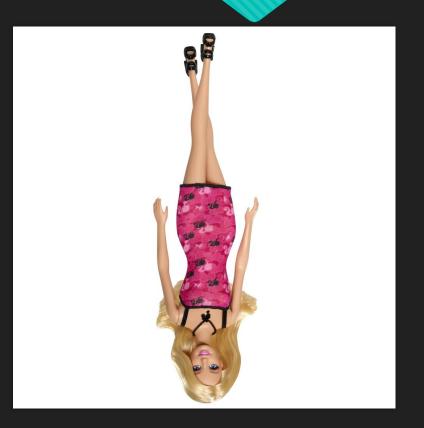
- Three ways of creating the illusion of life
  - O Furby must show emotion
    - O Ears and eye movement show happiness and fear
      - O Eyes only move up and down because side to side looks shifty
  - O Furby must be aware of its surroundings
    - O It can detect light and movement
  - Changes over time
    - O Language adaptation over time

# THE EXPERIMENT

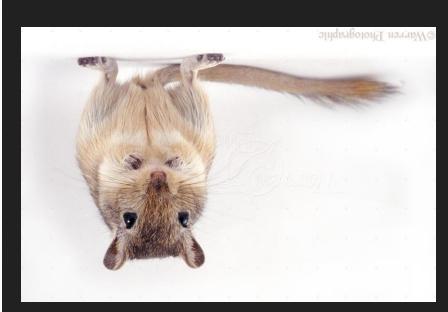








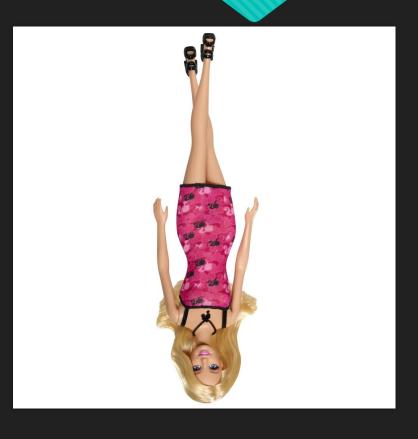




# 5 MIN

# 1 MIN

# 8 SEC







#### **Dolls VS Robots**

- Sherry Turkle
  - O Furbies push our Darwinian Buttons
- Relationship of Projection
- Relationship of Engagement

# **Interviewing Robots**

O BINA48



- O Moral of the story = people will respond to robots if it is relatable.
- O We as humans put meaning into what we look at.
- Programmable human responses.

# Are Machines Capable of Original Thought?