Digital Media, Society, and Culture

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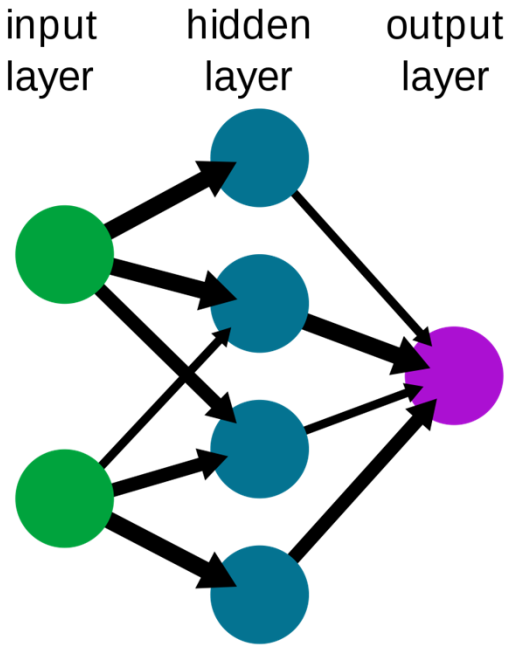
Before we start…

- Portfolio deadline (23:59, 23 December):
  - Final submission date for any portfolio content
  - Essay re-take assignment (4-2-2022)
    - Long-form essay
    - Published on course website
    - Also submit via Brightspace
- Literature Take Aways, part 2

- Presentations
  - Schedule is on Brightspace
  - Keep to the time!
  - On Campus, in the same rooms

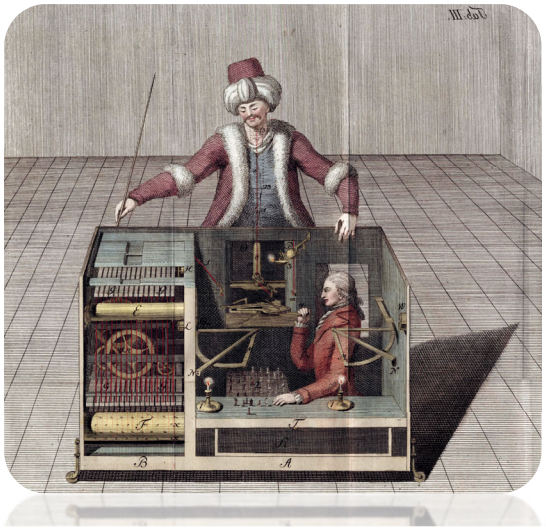
What is AI, Machine Learning, Neural Networks, Deep Learning, [insert another technical term here]?

A simple neural network [that is already too complex for me]

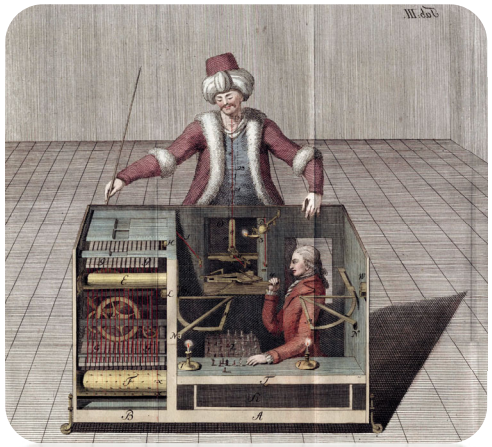


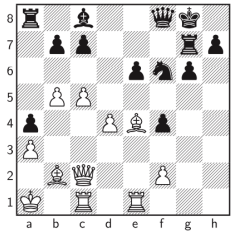
The Quest to Build Intelligent Machines!

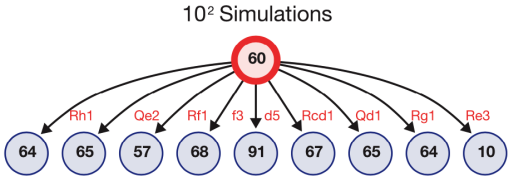
Are Computers ~~Smart~~ Having Fun?

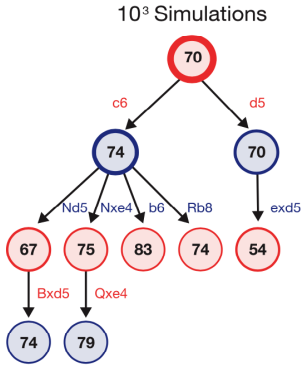


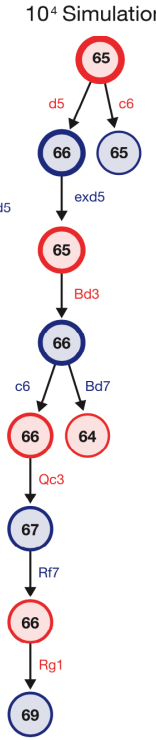
Are computers better at Chess?

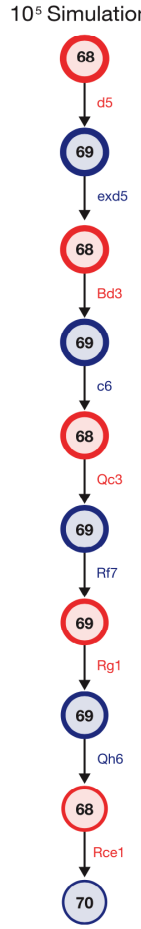


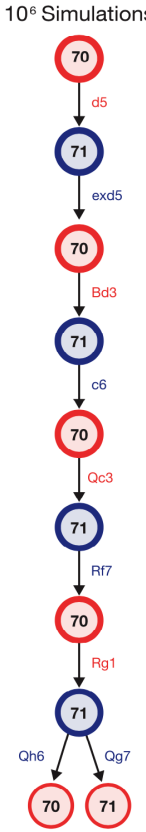



10² Simulations
60
Rh1 Qe2 Rf1 f3 d5 Rcd1 Qd1 Rg1 Re3
64 65 57 68 91 67 65 64 10


10³ Simulations
70
c6 d5
74 70
Nd5 Nxe4 b6 Rb8 exd5
67 75 83 74 54
Bxd5 Qxe4
74 79

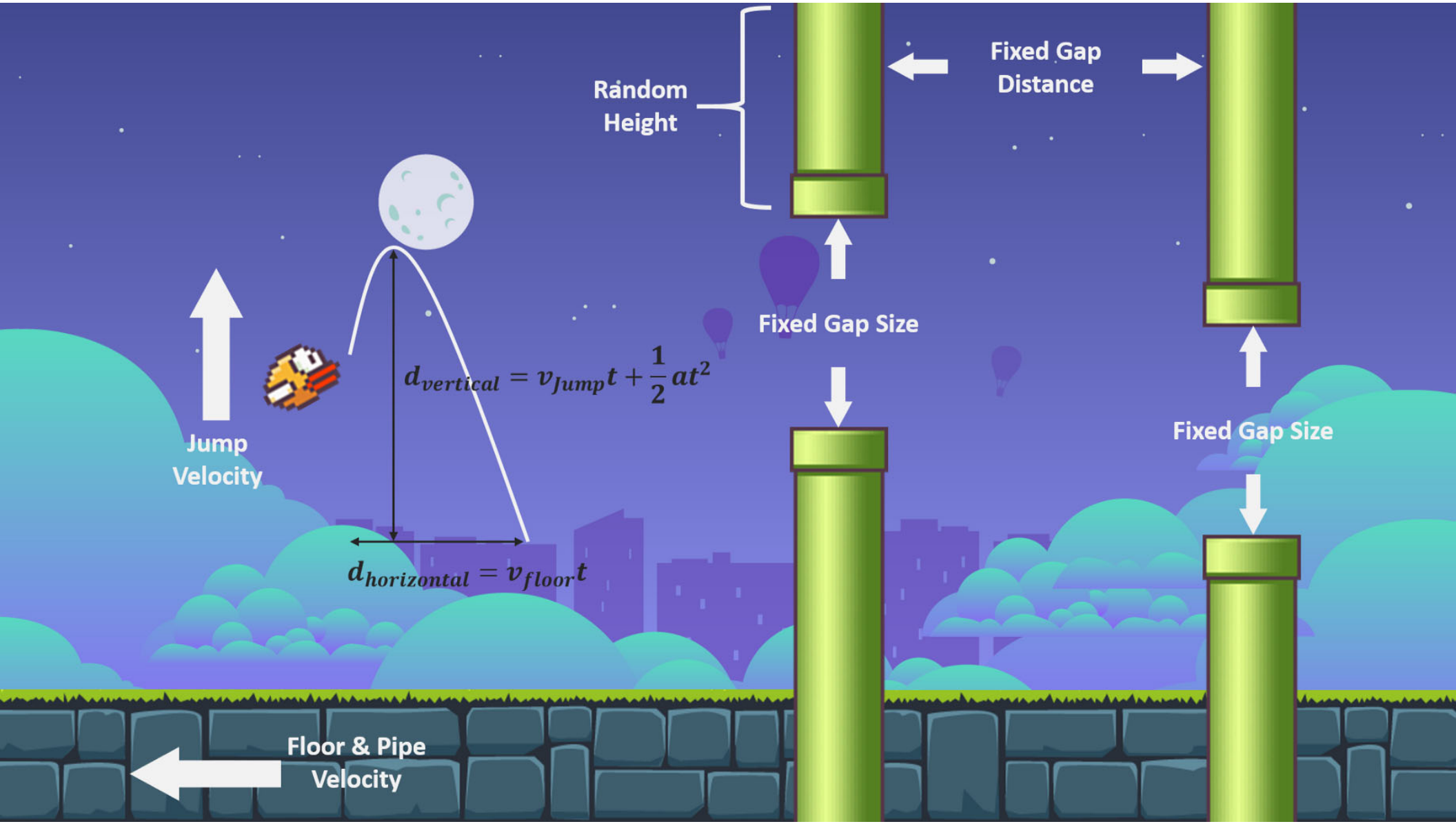

10⁴ Simulations
65
d5 c6
66 65
exd5
65
Bd3
66
c6 Bd7
66 64
Qc3
67
Rf7
66
Rg1
69


10⁵ Simulations
68
d5
69
exd5
68
Bd3
69
c6
68
Qc3
69
Rf7
69
Rg1
69
Qh6
68
Rce1
70

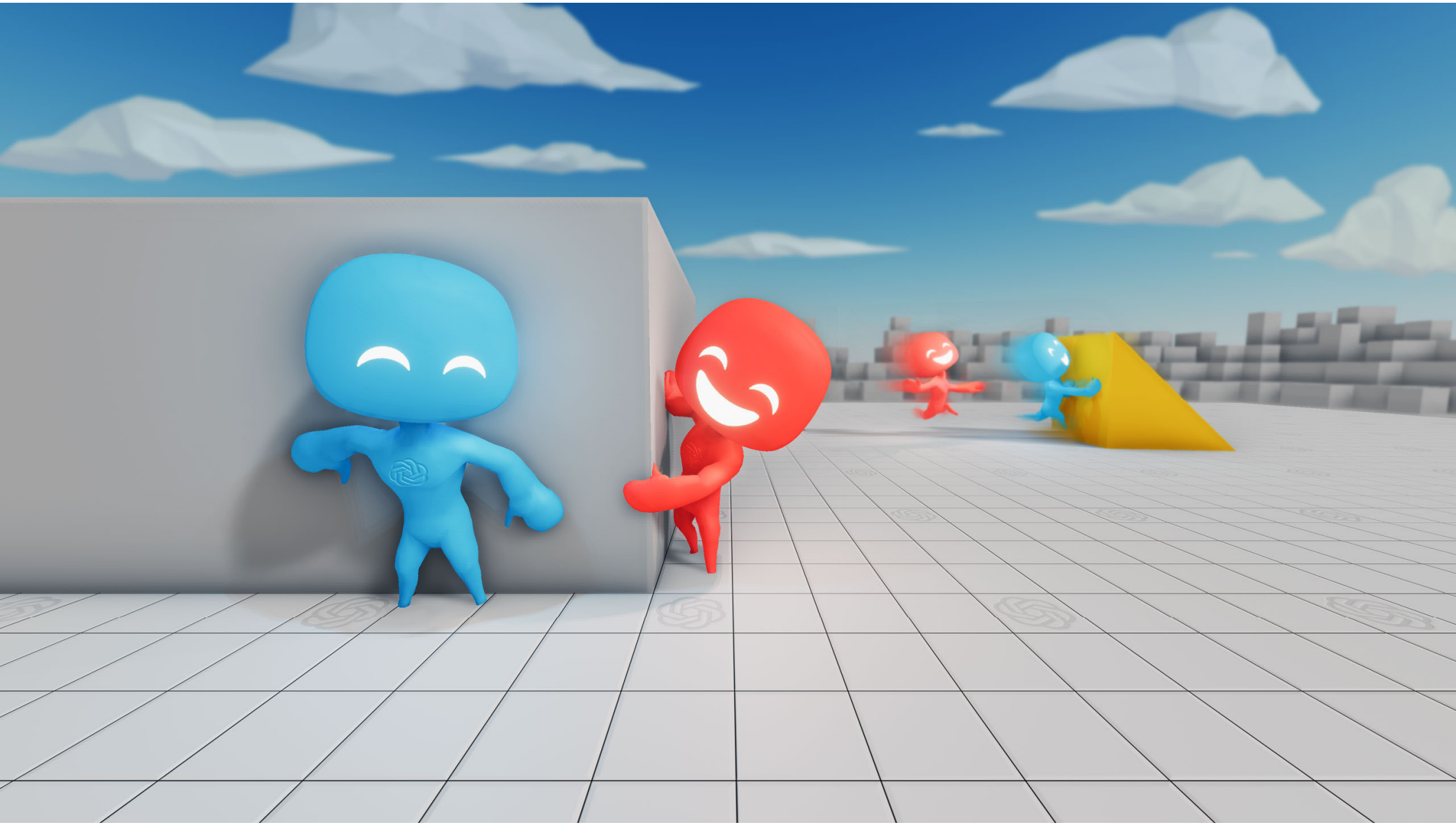

10⁶ Simulations
70
d5
71
exd5
70
Bd3
71
c6
70
Qc3
71
Rf7
70
Rg1
71
Qh6 Qg7
70 71

Are computers better at Flappy Bird?

Flappy Bird


Random Height
Fixed Gap Distance
Fixed Gap Size
Fixed Gap Size
Jump Velocity
$d_{vertical} = v_{Jump}t + \frac{1}{2}at^2$
$d_{horizontal} = v_{floor}t$
Floor & Pipe Velocity

Are computers better at having fun?



Are computers better at writing?

Are computers better at making music?

Are computers better at making visual art?

Are computers better at talking?

Are computers better at dreaming?

Are computers better at trading stocks (stonks!)?

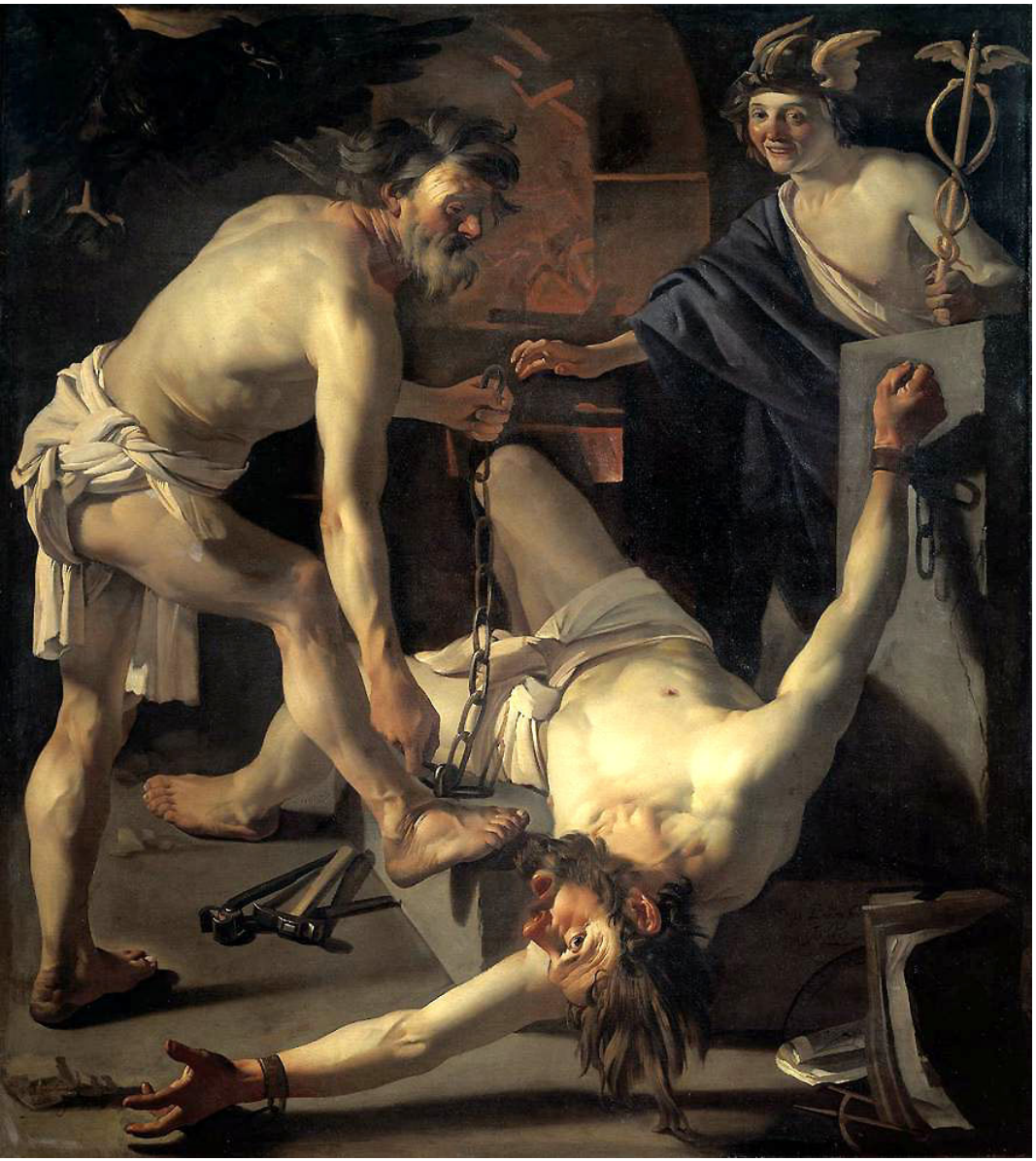
Are computers better at thinking?

Are computers better?

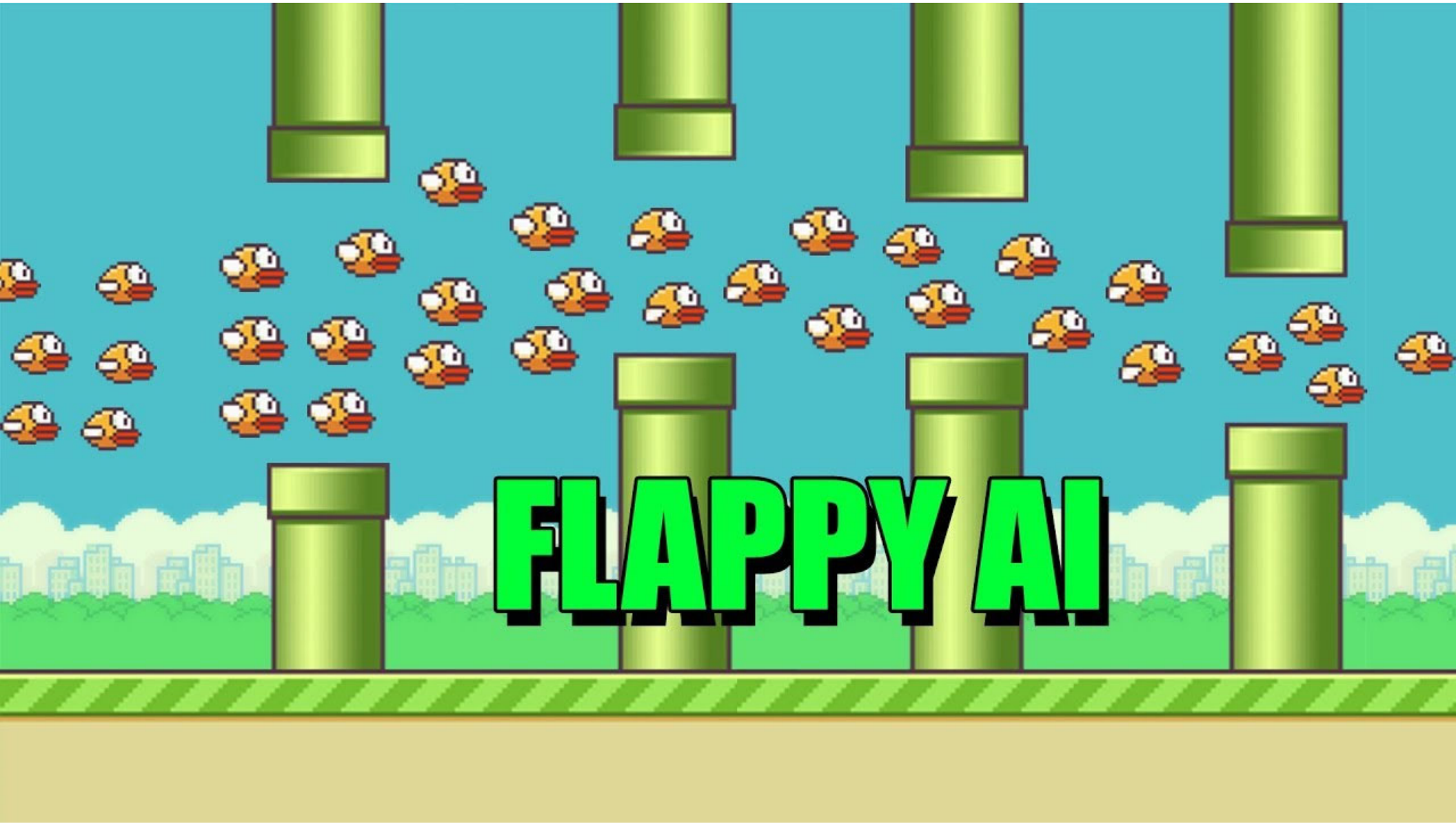
It depends...

- On the domain and definition of qualifications
- On what input we give to computers (data)
- On what output we ask from computers (objective function)
- On our *human(ities)* questions, desires, and fears!

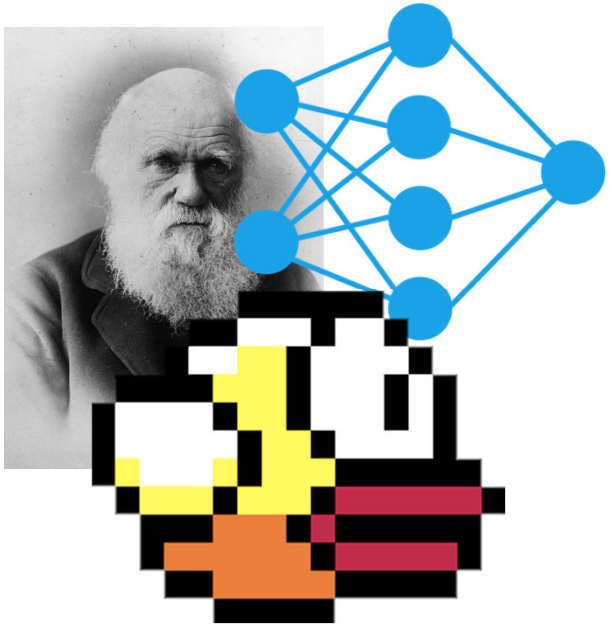
Will AI take over our world?



Will we make AI suffer?

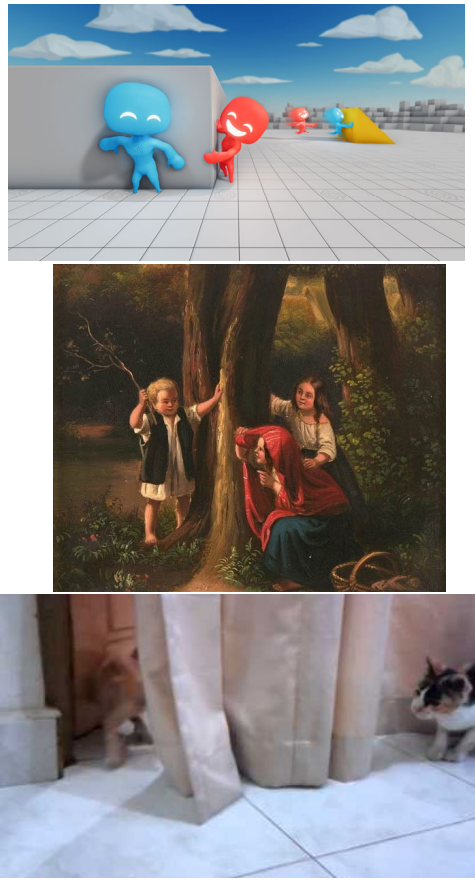

FLAPPY AI

AI is (part of) the digital future, but it is rooted in our past cultures.



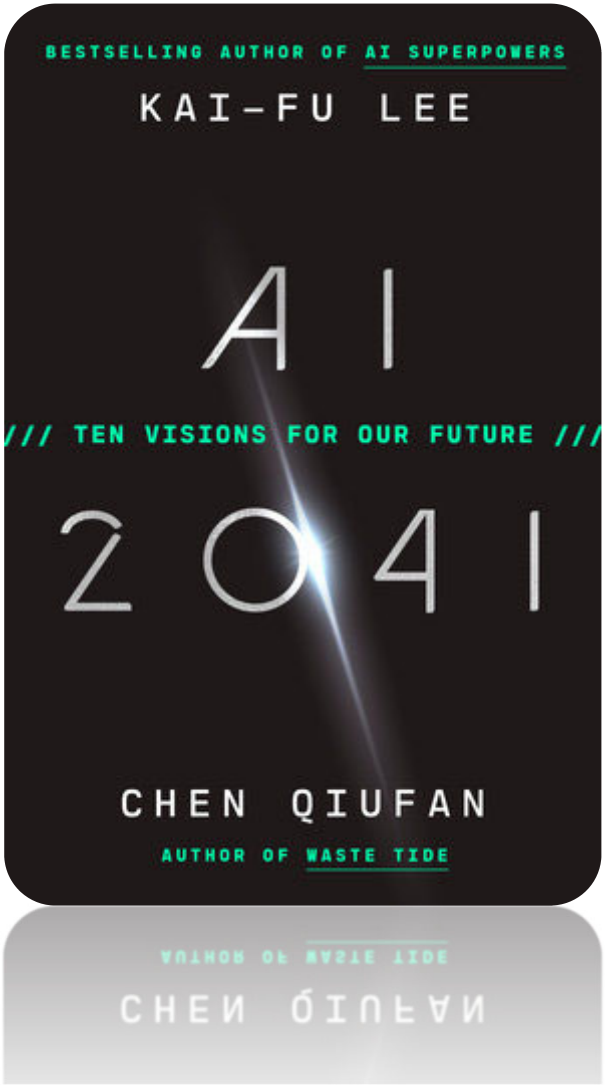
Neuro**evolution** of augmenting topologies (NEAT) plays Flappy Bird

A piece from the 12th century Lewis chess set.



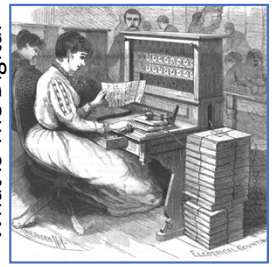
Hide and Seek

The Digital & Humanity: Better Together

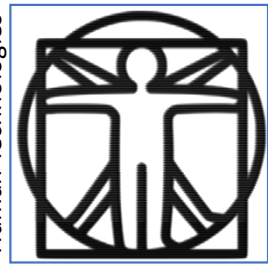


Digital Media, Technology, Society, and Culture

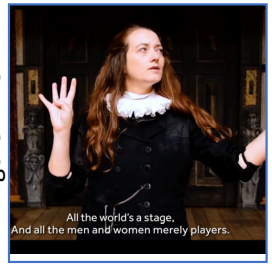
What is The Digital



Human Technologies



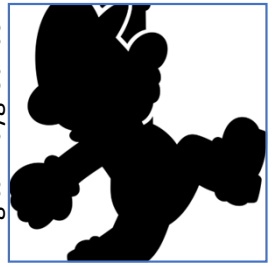
Ego Online



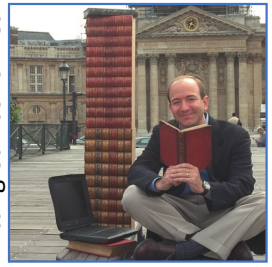
Silicon Valley

The World Brain

Digital Playgrounds

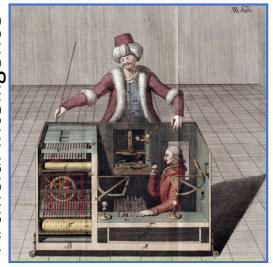


Entangled Economies



Networks

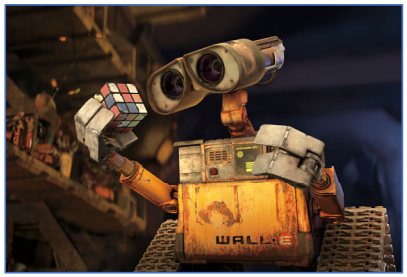
Artificial Intelligence

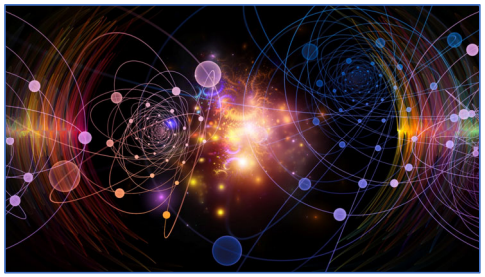


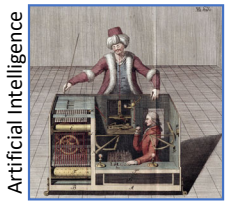
Cyborgs

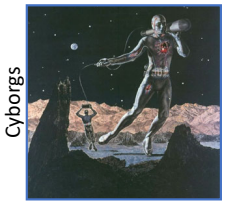
Metaverse

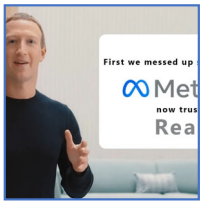
So… what's next?

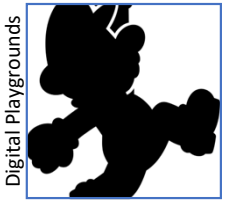


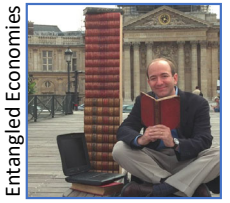


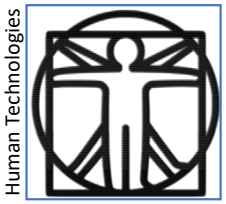












The Future is Up to You!