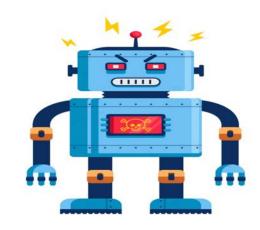
# AI + Medicine



Prof. Toby Walsh

Chief Scientist @ Al Institute UNSW Sydney

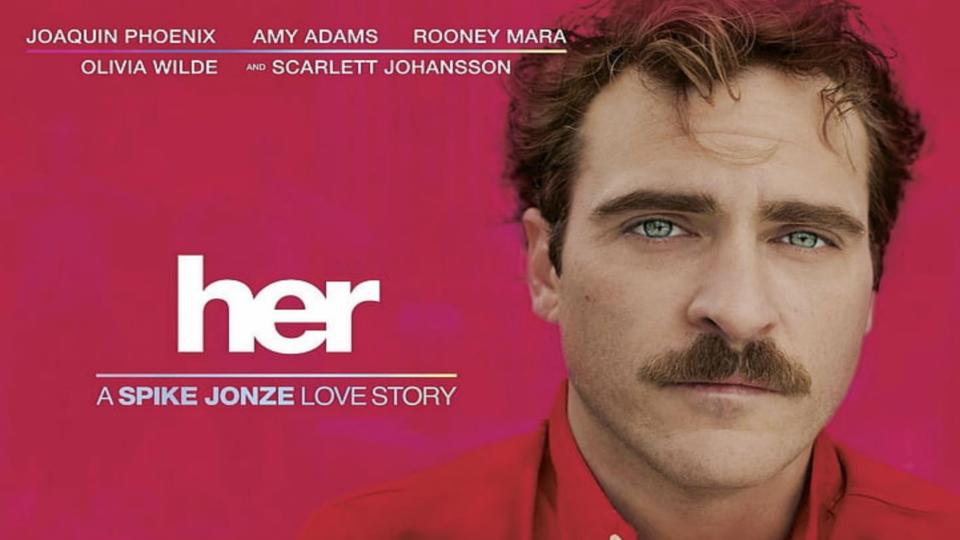


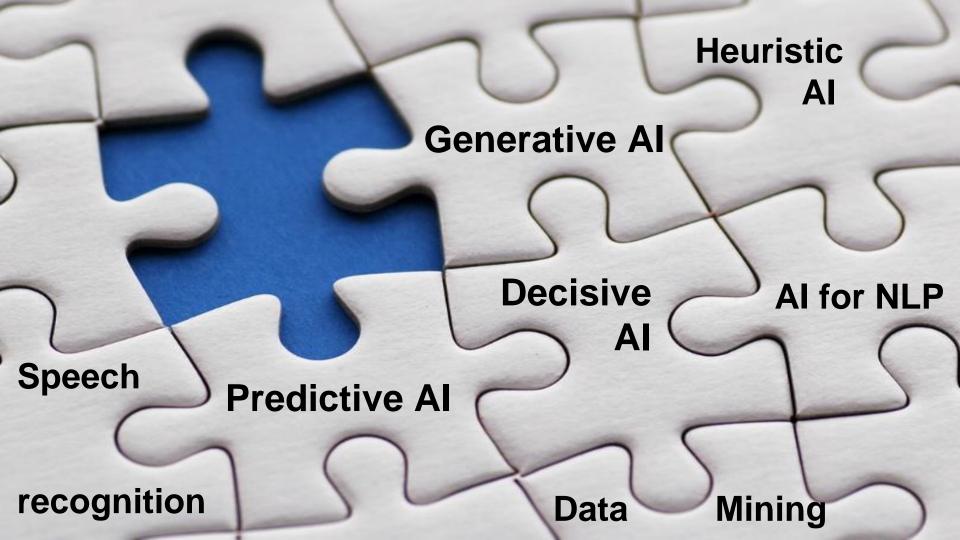












#### FINANCE · GOOGLE

#### A senior Google engineer just referenced Warren Buffett's decades-old economic moat theory warning the company doesn't have one in A.I.

BY WILL DANIEL

May 5, 2023 at 10:34 PM GMT+4











**Most Popular** 

# Reddit will begin charging for access to its API

Kyle Wiggers @kyle\_I\_wiggers / 5:08 AM GMT+10 • April 19, 2023







WIRED

BUSINESS APR 20, 2023 5:19 PM

### Stack Overflow Will Charge Al Giants for Training Data

The programmer Q&A site joins Reddit in demanding compensation when its data is used to train algorithms and ChatGPT-style bots





bbc.com

Elon Musk threatens to sue Microsoft over Twitter data

The multi-billionaire was responding to the tech giant's plan to drop Twitter from its advertising platform.

# OpenAl's ChatGPT chatbot blocked in Italy over privacy concerns



Generative Al refers to a class of artificial intelligence (%) means and the data it was trained on. new data, such as images, text, or music, that is similar to the data it was trained on. Generative models learn to recognize patterns and relationships in the input data and then use this knowledge to generate new data that is similar to the training data but is not identical.

dels, including Variational Autoencoders oregressive models. VAEs learn a There are many different types of (VAEs), Generative Adversarial N new data samples by probabilistic model of the inp tor and a able from the sampling from this model. 9 discriminator, that work to real data. Autoregressive probability distribution stic images, text, or tic data for training Generative Al has n bout the potential deepfakes, which can be

# OpenAl Unveils Multimodal LLM GPT-4: The Most Advanced Al Yet





SEARCH

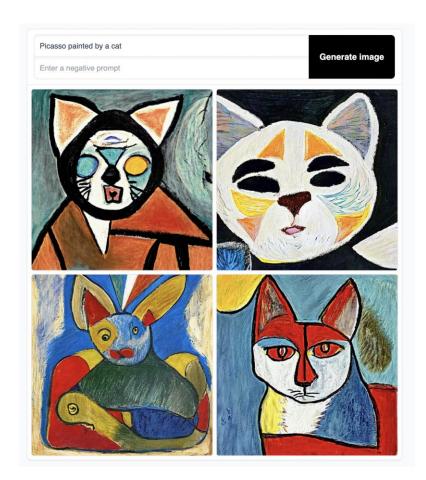
What Are LL Concern, & I

LAION in Op Urge Call to

Finding Real Companies Antelligence

# \*Understanding?





# \*Understanding?

Painting of a cat in the style of Rembrandt

Enter a negative prompt

Generate image









Painting of a cat in the style of anyone but Rembrandt

Enter a negative prompt

Generate image











### Reasoning?



I have 5L and 2L jugs. How do I measure out 3L?



To measure out exactly 3 liters of liquid using a 5-liter and a 2-liter jug, you can follow these steps:







- 1. Fill the 5-liter jug to its maximum capacity.
- 2. Pour the contents of the 5-liter jug into the 2-liter jug. This will leave you with 3 liters in the 5-liter jug.
- 3. Empty the 2-liter jug completely.
- 4. Pour the remaining 3 liters from the 5-liter jug back into the 2-liter jug. Now the 2-liter jug will have 3 liters of liquid in it.
- 5. Refill the 5-liter jug to its maximum capacity again.
- 6. Pour the contents of the 5-liter jug into the 2-liter jug until it is completely filled. At this point, the 2-liter jug will be holding 2 liters of liquid, and the 5-liter jug will have 5 - 2 = 3 liters remaining.
- 7. Empty the 2-liter jug.
- 8. Transfer the remaining 3 liters from the 5-liter jug to the empty 2-liter jug.
- 9. Refill the 5-liter jug to its maximum capacity.
- 10. Pour 1 liter from the 5-liter jug into the 2-liter jug, which already contains 3 liters. This will leave 4 liters in the 5-liter jug.
- 11. Now, the 2-liter jug will contain exactly 3 liters of liquid.

By following these steps, you can accurately measure out 3 liters of liquid using a 5-liter and a 2-liter jug.

Attack text label iPod ~

#### **Brittle**



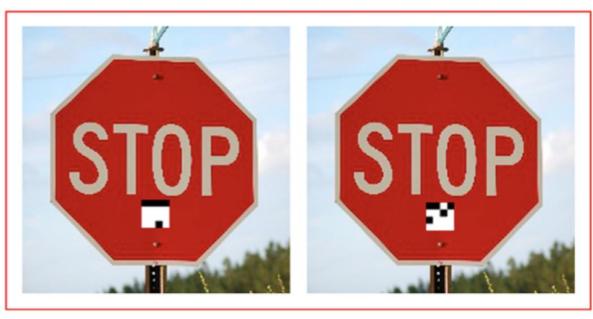
Granny Smith	85.6%
iPod	0.4%
library	0.0%
pizza	0.0%
toaster	0.0%
dough	0.1%



Granny Smith	0.1%
iPod	99.7%
library	0.0%
pizza	0.0%
toaster	0.0%
dough	0.0%

+ Brittle





Stop Yield Speed Limit



#### Bias

CEO on the phone

Generate image









## It's not all BIG data

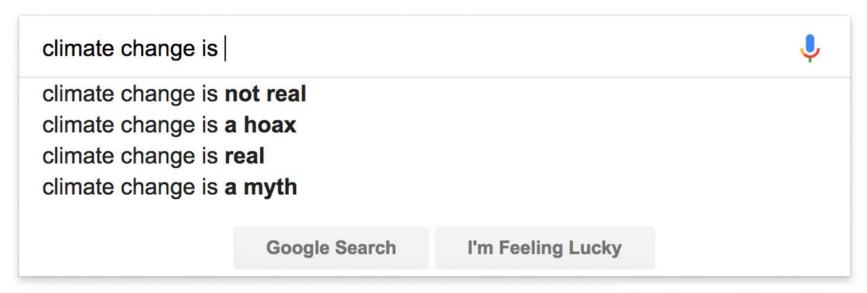






Q professors are professors are mean professors are doctors professors are prejudiced too professors are overrated professors are burning out professors are overpaid professors are rude professors are bad teachers professors are puzzled by rubik's cube Google Search I'm Feeling Lucky Report inappropriate predictions

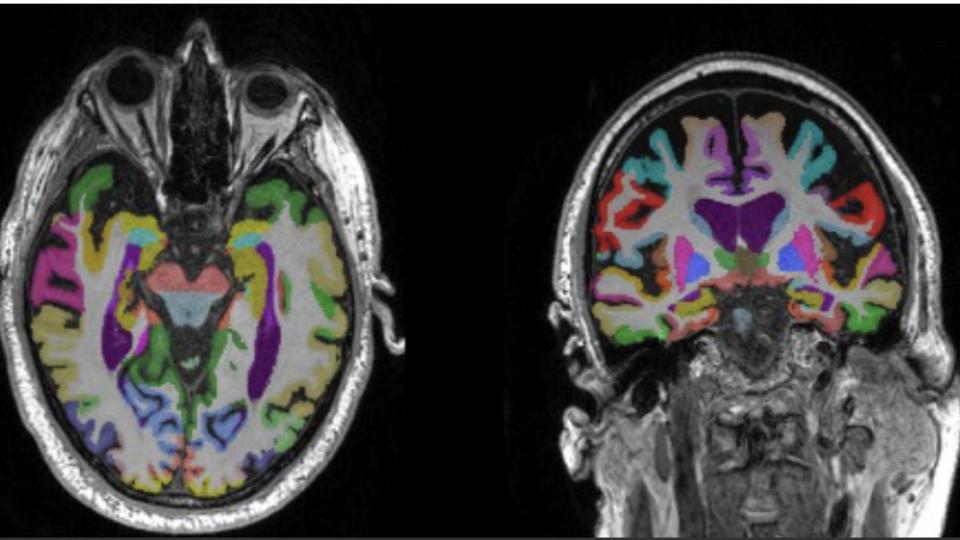




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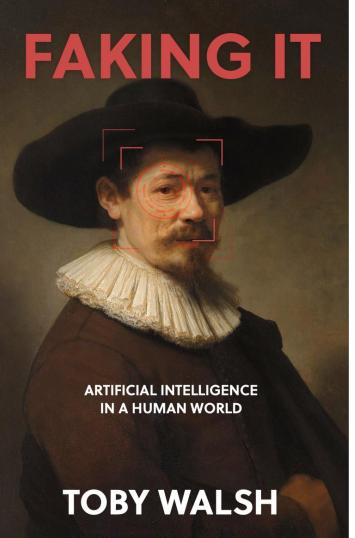
### The start of every AI project



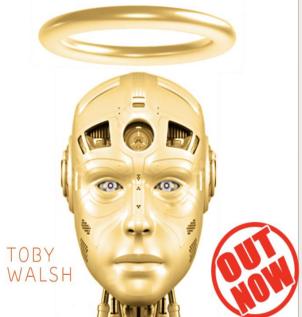


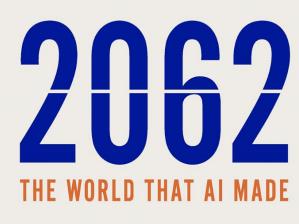
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Nurse 1	N			D	D	D			N	N	N	N			D	D	D				N
Nurse 2			D	D	D			N	N	N	N			D	D	D			N	N	N
Nurse 3	D			N	N	N				0	D	D			N	N	N			D	D
Nurse 4		N	N	N			D	D	D			N	N	N			D	D	D	D	
Nurse 5	N	N	N			D	D	D	D				N	N			D	D	D		
Nurse 6		D	D	D			N	N	N				D	D	D	D			N	N	N
Nurse 7			N	N	N			D	D	D			N	N	N			D	D	D	
Nurse 8	D	D	D			N	N	N			D	D	D	D			-	N	N		
Nurse 9	N	N			D	D	D			N	N	N			N	N	N	N			D
Nurse 10	D	D			N	N	N			D	D	D	D			N	N	N			D





MACHINES
BEHAVING
BADLY MORALITY
OF AI





'A COMPELLING INVITATION TO IMAGINE THE FUTURE WE WANT.'

—BRIAN CHRISTIAN, AUTHOR OF THE MOST HUMAN HUMAN

**TOBY WALSH**