



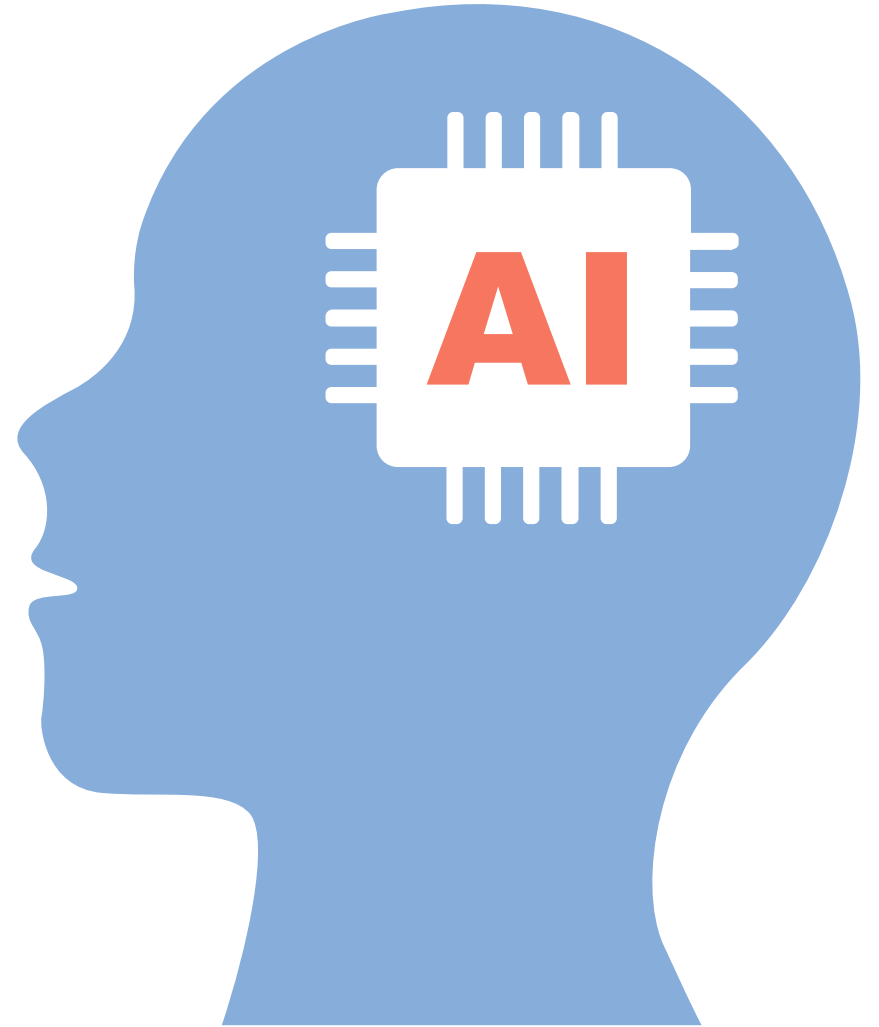
Artificial Intelligence and the Future of Education

Okan Bulut
University of Alberta



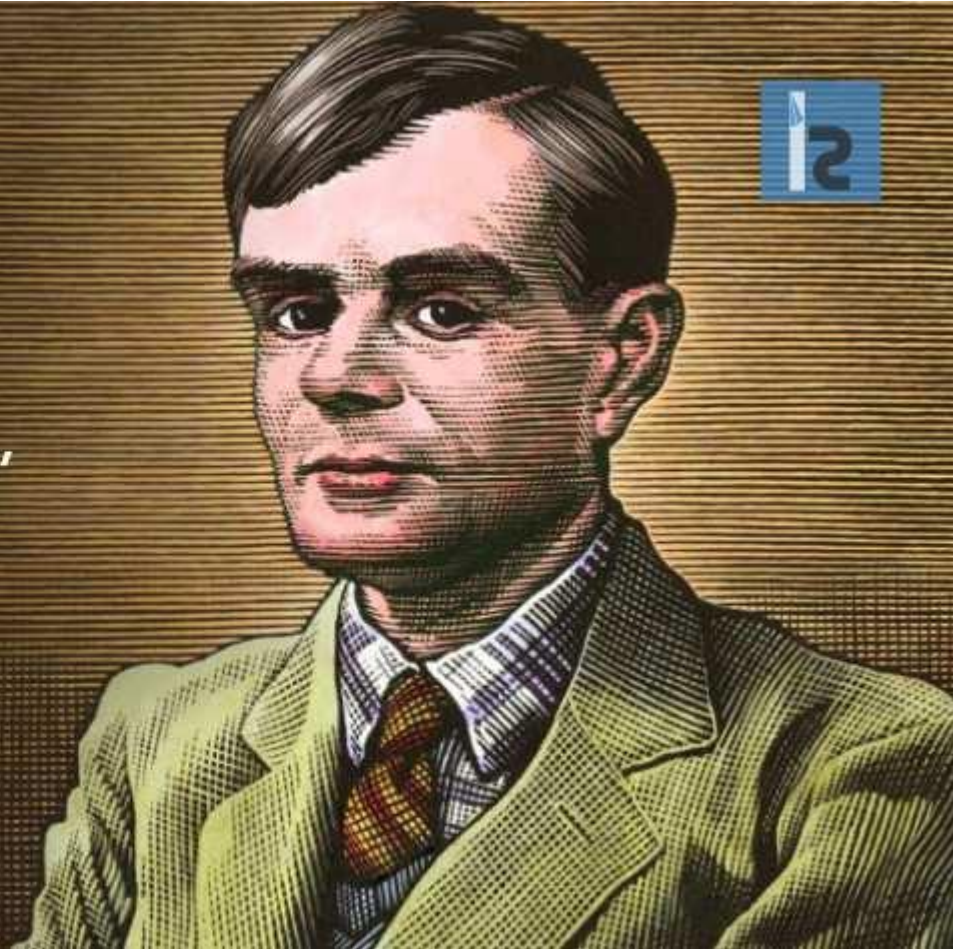
ARTIFICIAL INTELLIGENCE

“Having a computer do something that we assume(d) only entities having human-like intelligence could do.”



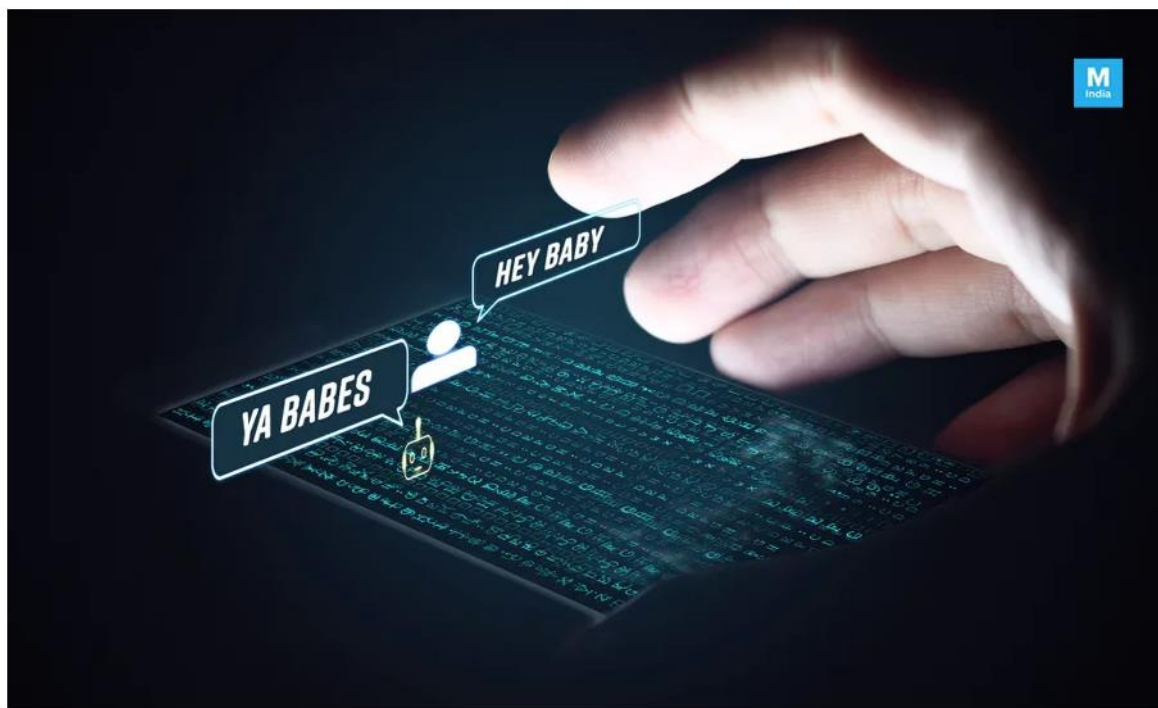
If a human could not
distinguish between
responses from a
machine and a human,
the machine could
be considered
"INTELLIGENT"

-Alan Turing

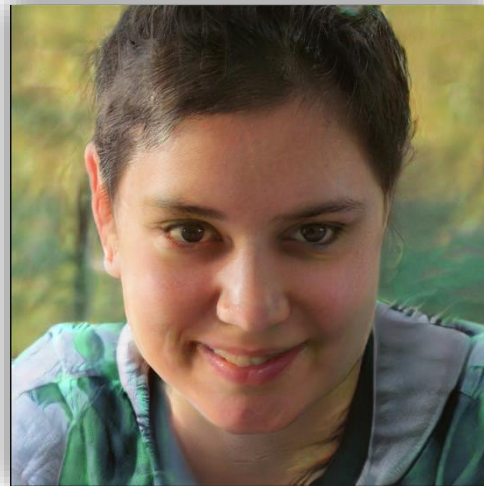


Source: <https://www.insightssuccess.com/what-is-artificial-intelligence/>

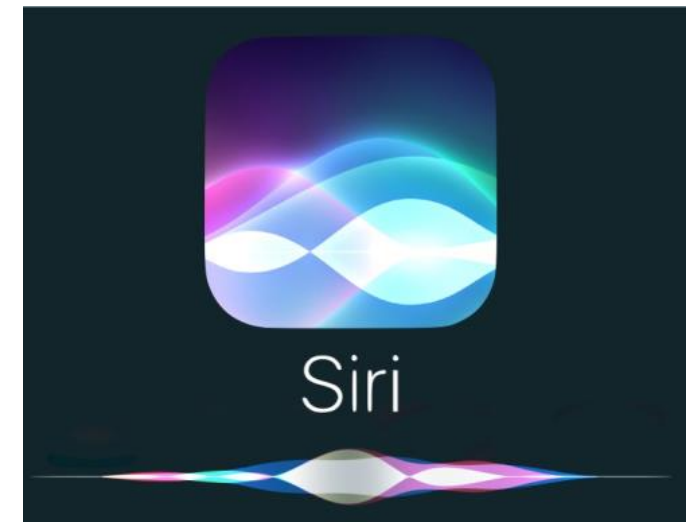
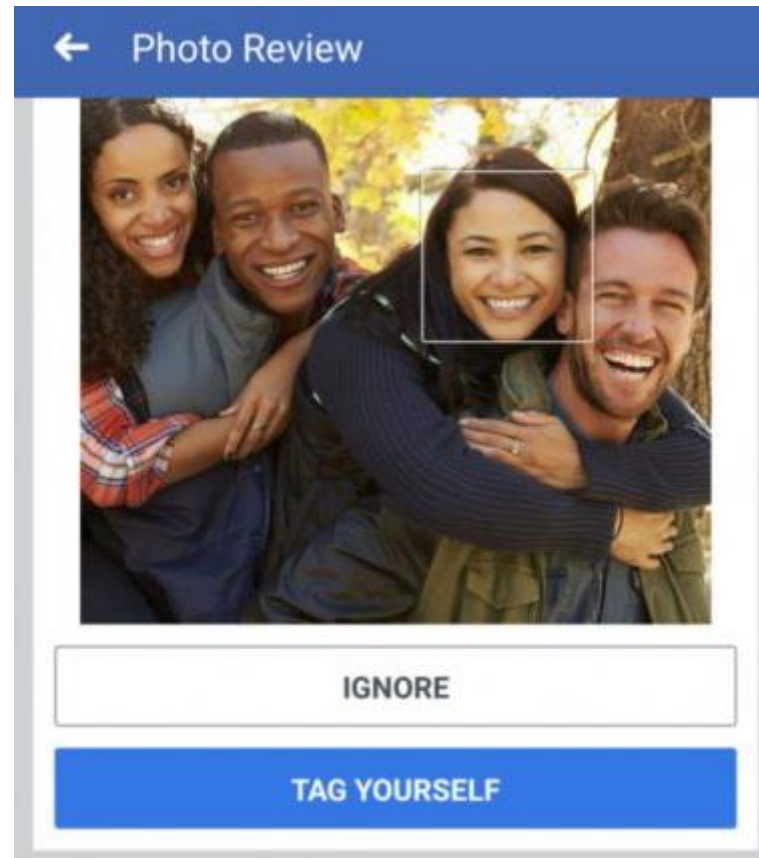
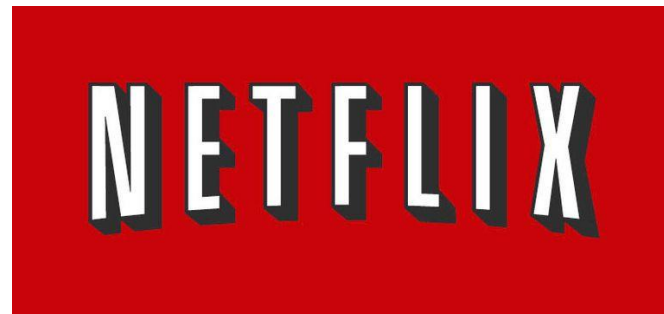
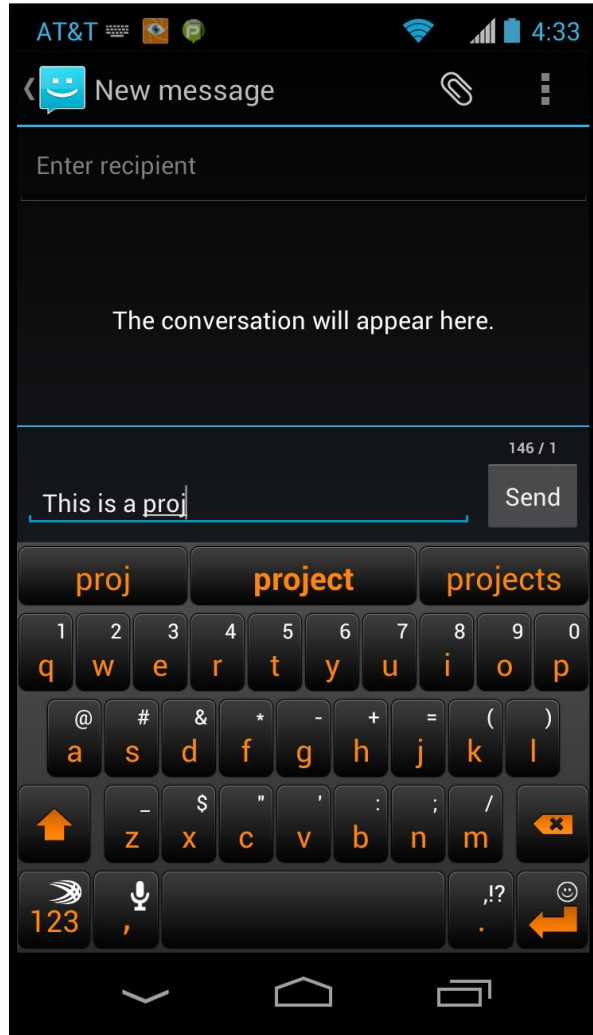
Busy Programmer Designs Chatbot To Talk To His Girlfriend While At Work



Source: <https://in.mashable.com/tech/4051/busy-programmer-designs-chatbot-to-talk-to-his-girlfriend-while-at-work>



<https://thispersondoesnotexist.com/>

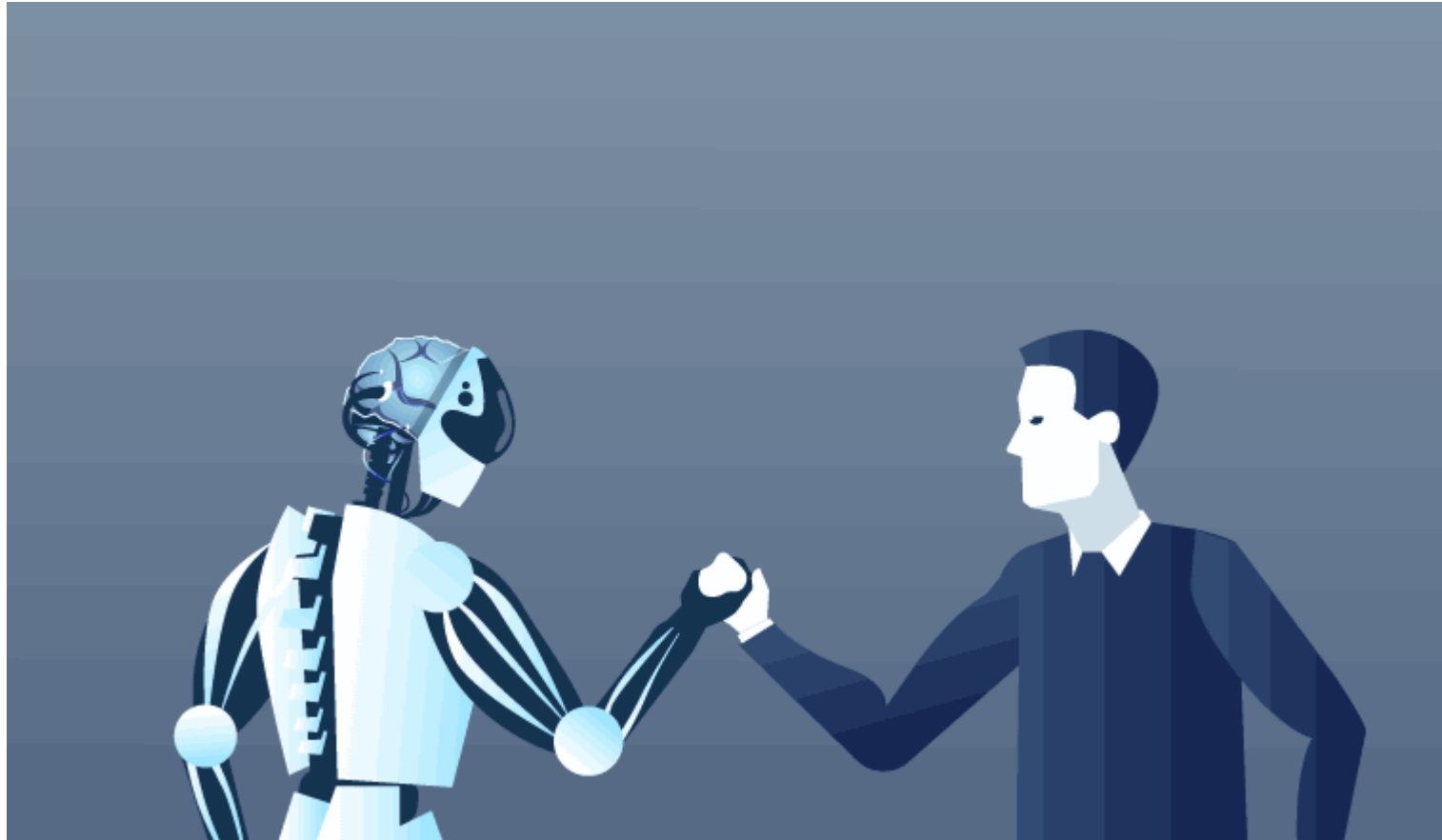




Source: <https://waymo.com/>

ENHANCED
AUTOMATION

REDUCED
ERROR



BETTER
FORECASTING

QUICK
RESPONSE
TO DISASTERS

Source: <https://interestingengineering.com/7-ways-ai-will-help-humanity-not-harm-it>

A In Education...

THEORY:

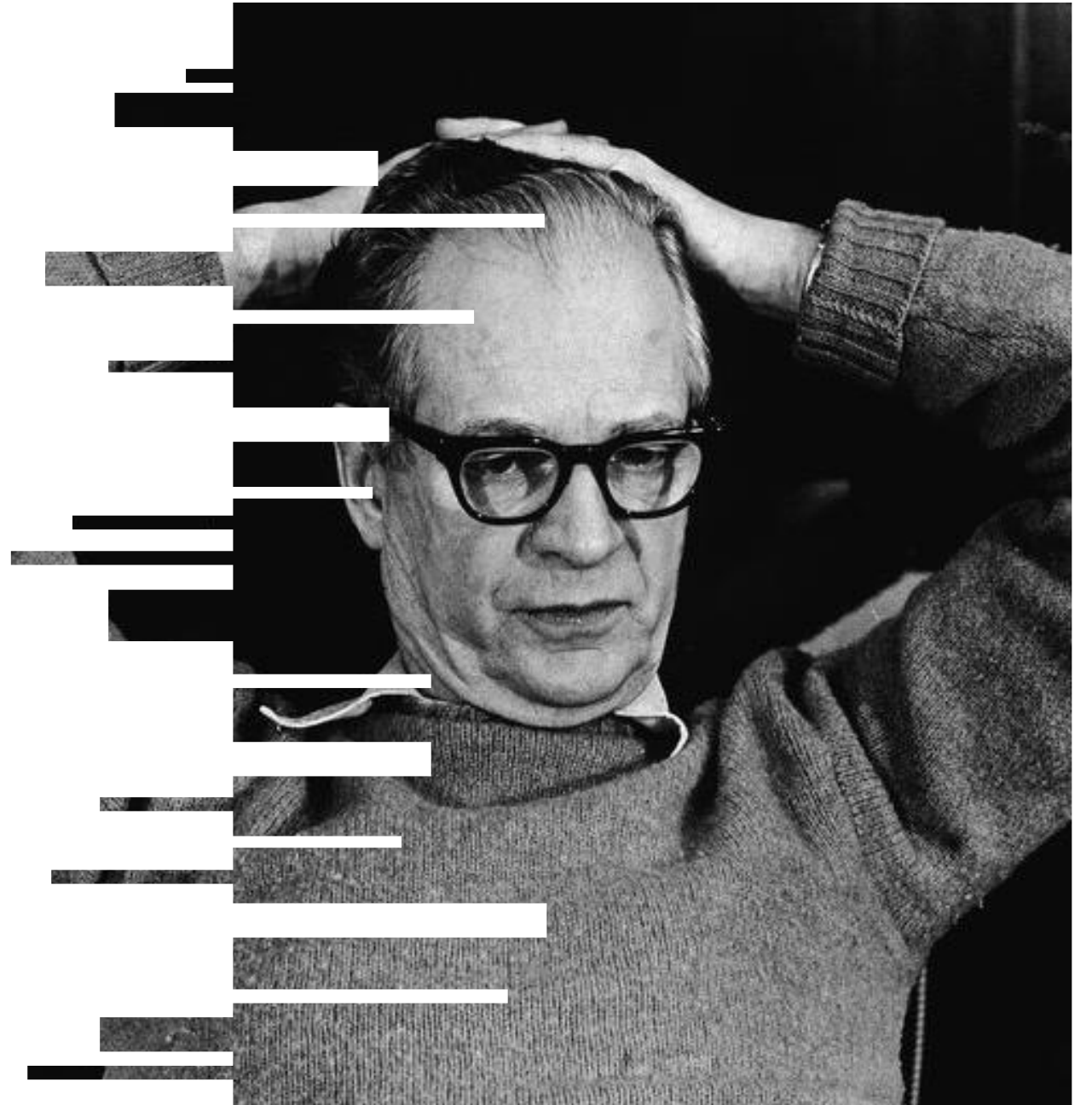


REALITY:



Theories are fun... But it is possible that the most rapid progress toward an understanding of learning may be made by research that is *not* designed to test theories.

B. F. Skinner (1954)

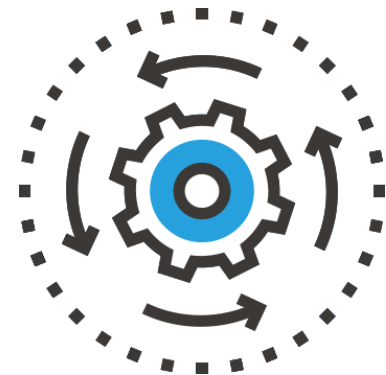
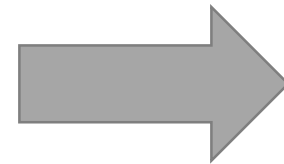
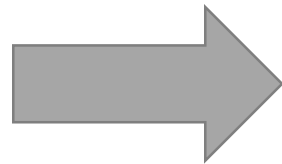
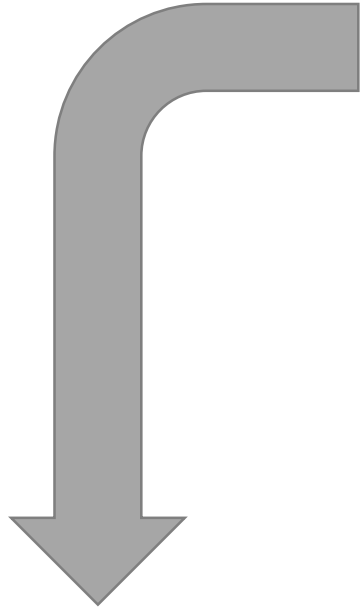
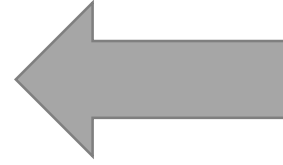
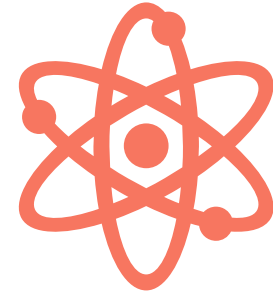




Source: [Rowley, J. E. \(2007\). The Wisdom hierarchy: Representations of the DIKW hierarchy. *Journal of Information Science*, 33,\(2\), 163-80.](#)

Education


Knowledge



Observe

Data

Process

 > News

Chinese school uses facial recognition to monitor student attention in class



A Chinese classroom CREDIT: CHINAFOTOCCLASSROOM/GETTY

MORE STORIES

- 1 Chris Froome wakes in intensive care to find he may have won seventh grand tour title
- 2 Grow up and stop calling me the c-word live on air, Jeremy Hunt tells broadcasters
- 3 The Jo Brand scandal has revealed the Left's hypocrisy, but the answer isn't yet more censorship
- 4 Veteran Mastermind contestant will be seen in the final on the day of his funeral
- 5 Jo Brand investigated by Met Police over BBC 'battery acid' joke

FOLLOW THE TELEGRAPH



Early Warning System Predicts Risk of Online Students Dropping Out

With the new system, every student is scored based on how likely they are to finish their courses

By **Michelle Hampson**



Source: <https://spectrum.ieee.org/tech-talk/computing/software/a-predictive-modeling-tool-for-identifying-postsecondary-students-at-risk-of-dropping-out>



Need to talk to
someone NOW?
Call this Helpline:



866-966-1020

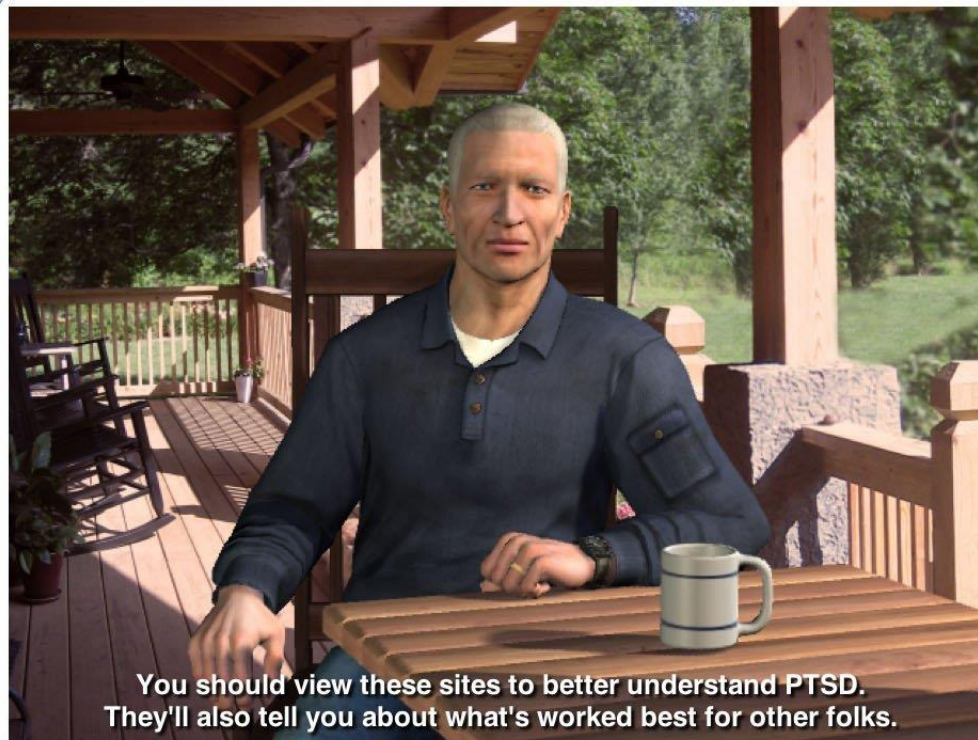
Welcome Guests!

Username:

Password:

Registration is OPTIONAL

Learn more about profiles [HERE](#)



You should view these sites to better understand PTSD.
They'll also tell you about what's worked best for other folks.

Alright I'll check those out.



SEND

Hello, welcome to Simcoach.

Some things before we get started: I'm based on the real experiences of warfighters and their families, but I am not a real human, so please be patient with me, and talk in short sentences. Far as conversations go, I'm best at talking about PTSD and depression. I'm not a shrink, but I'm here to help.

I'd like to ask you a few questions to get to know you a bit. Ok?

no

I think I can help you better if I know where you're coming from.

ok?

no

that's ok

What's the major concern that brought you here today?

STREAM

NOTES



PRINT

Other **AI** Applications



**PERSONALIZED
EDUCATION**



**INTELLIGENT
TUTORING SYSTEMS**



**AUTOMATED SCORING
FOR SPEECH AND
WRITING**



**CAREER PATH
PREDICTION**



Information from
high-quality and
accurate data

Garbage *in* Garbage **OUT**



Michigan's MiDAS Unemployment System: Algorithm Alchemy Created Lead, Not Gold

A case study into how to automate false accusations of fraud for more than 34,000 unemployed people

By Robert N. Charette

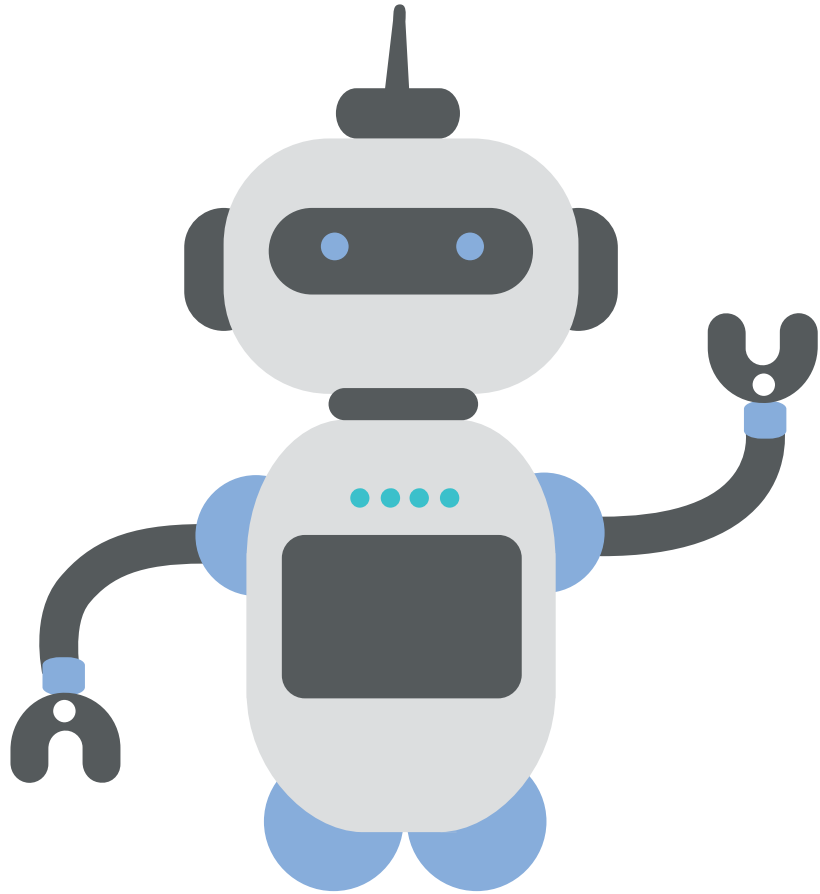


Source: <https://spectrum.ieee.org/riskfactor/computing/software/michigans-midas-unemployment-system-algorithm-alchemy-that-created-lead-not-gold>



“The true sign of **intelligence** is not knowledge, but **imagination**.”

-- Albert Einstein



Thank You

bulut@ualberta.ca