The AI Education Project presents

Introduction to Artificial Intelligence

Slide Deck

https://www.aiedu.org/

🎯 The Point

Not everyone agrees on the definition of AI, but one good definition is "a man-made system that exercises problem-solving or decision-making abilities normally associated with humans".
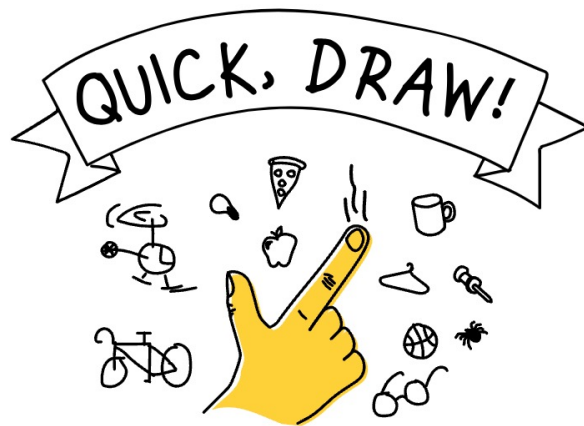
Explore AI Examples: Quick, Draw!

→ Explore the AI below:
- Quick, Draw!
- https://quickdraw.withgoogle.com/

While you play, think about these questions:
1. How does Quick, Draw! work (i.e. how does it know what you are drawing)?
2. Compared to humans, was the application better or worse at guessing your drawings?
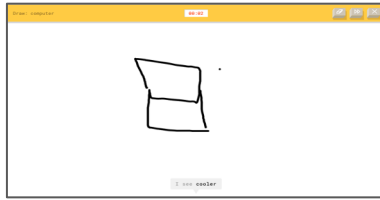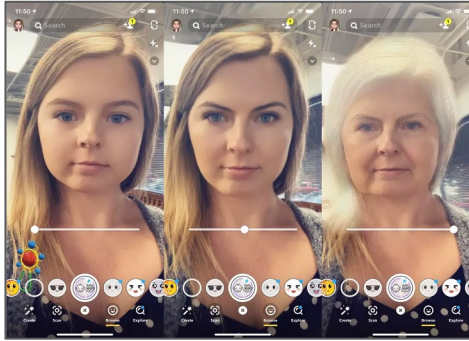
No Consensus

Definition	Source
"... technology that thinks and acts like humans"	Popular business use of the term as reported in a 2015 Narrative Science survey
"... the replication of human analytical and/or decision-making capabilities"	Steven Finlay, author of Artificial Intelligence and Machine Learning for Business, 2017
"... a computerized system that exhibits behavior that is commonly thought of as requiring intelligence"	U.S. Government definition (NSTC)
"... intelligence demonstrated by a machine or by software...[where] intelligence measures an agent's general ability to achieve goals in a wide range of environments"	Calum Chase, author of Surviving A.I.

What words, phrases, or ideas do these definitions seem to have in common?

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An ⭐ **AI** is a **man-made system**, such as a computer program, that exercises **problem-solving** or **decision-making** abilities **normally associated with humans**.

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AI in Your Everyday Life

Apps like Netflix, Amazon, and Spotify are called **recommendation systems**.

Recommendation systems use AI to make recommendations to users.
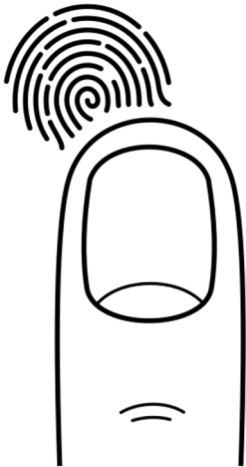
What kinds of things do Netflix and Amazon recommend?

🎯 **The Point**

AI **finds patterns in data** and works best with **lots and lots** of **high quality** data.

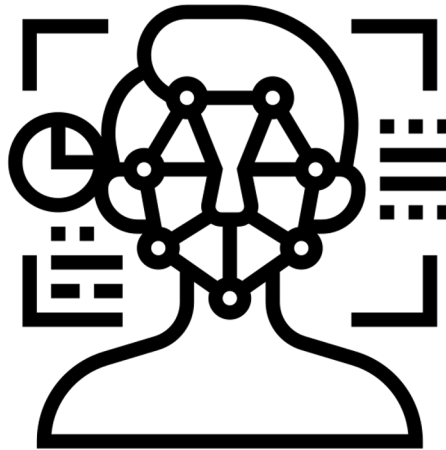# 🚨 Vocab alert!

- ⭐ **Data** is any form of recorded information.
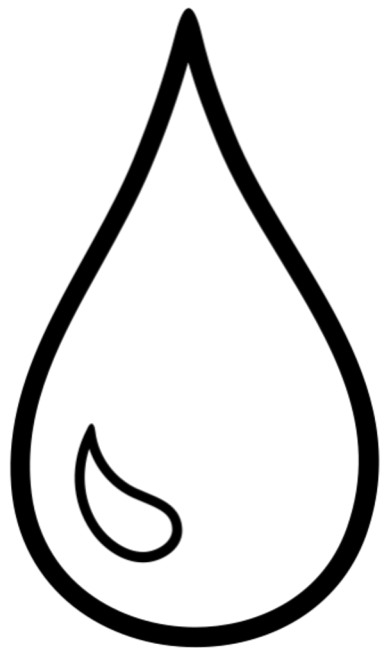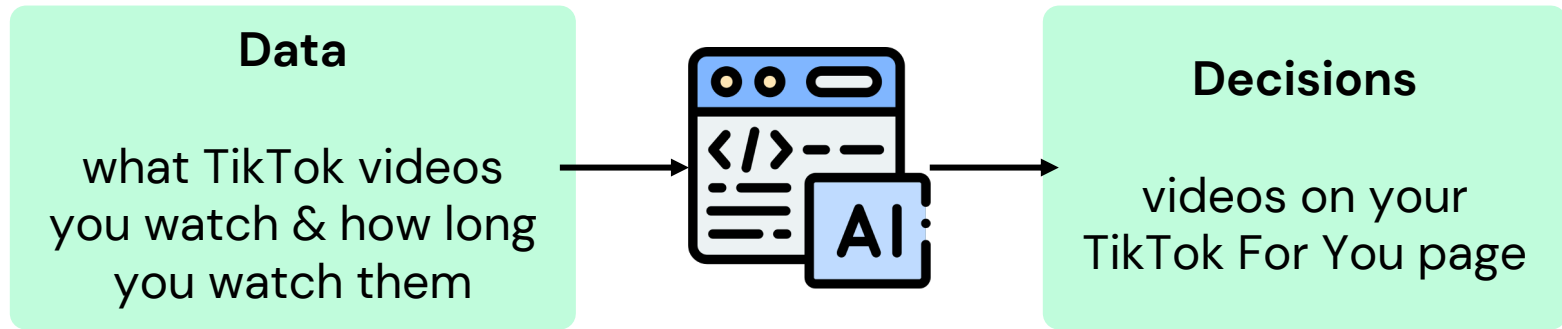- Examples include:

A fingerprint

A photo of a face

17

An age

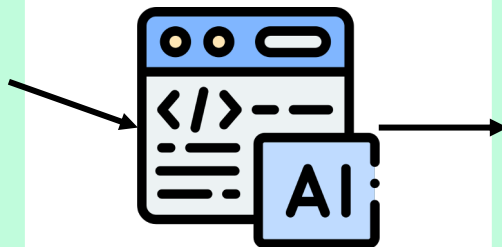**Data is the lifeblood of AI.** (You can't have AI without data.)

Example: AI finds patterns in data

Data

what TikTok videos you watch & how long you watch them

→

AI

→

Decisions

videos on your TikTok For You page

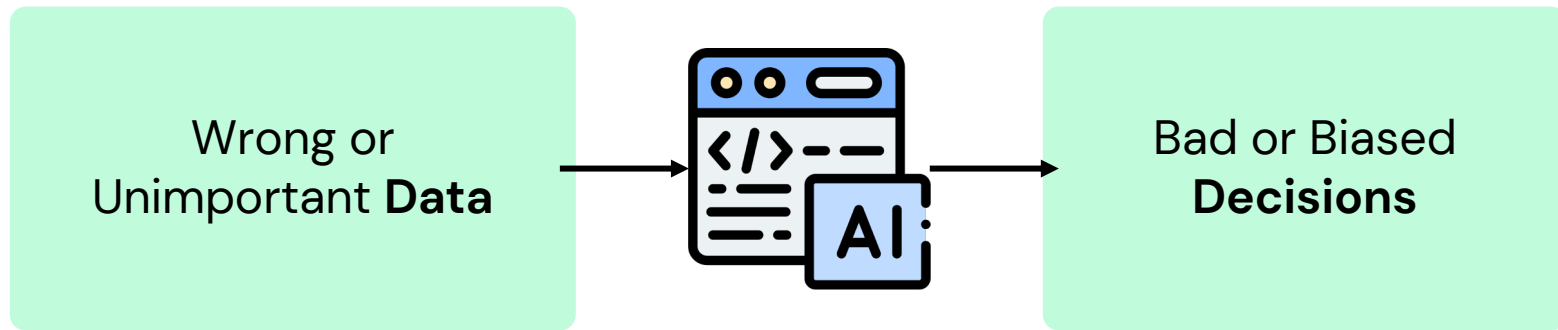# What do you think Snapchat uses this data for?

Data Snapchat Uses

- date of birth
- type of phone
- most and least used filters
- your interests
- how often you message each friend
- how often you open Snapchat

Decisions

???

Garbage in, garbage out

Wrong or Unimportant **Data** → **AI** → Bad or Biased **Decisions**

Machine Learning University

MLU Explain: Linear Regression

https://mlu-explain.github.io/linear-regression/

MLU Explain: The Importance of Data Splitting

https://mlu-explain.github.io/train-test-validation/