Using AI to Craft Conversational Experiences

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Who am I?

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Agenda

Today, you will learn...

- What is AI?
- AI + Conversations = ???
- Where to learn more about AI?

Logistics

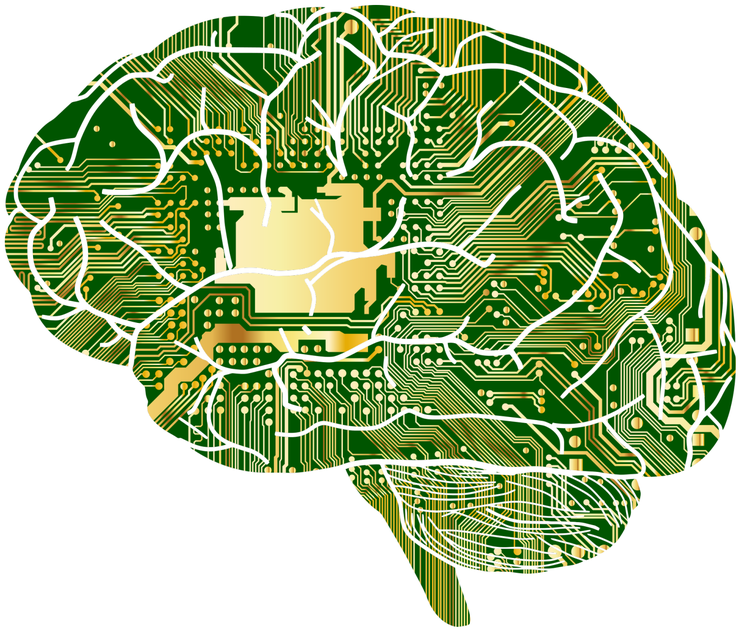
Post questions in chat at any time.
Designated blocks during the talk to review questions.

Questions

What is AI?

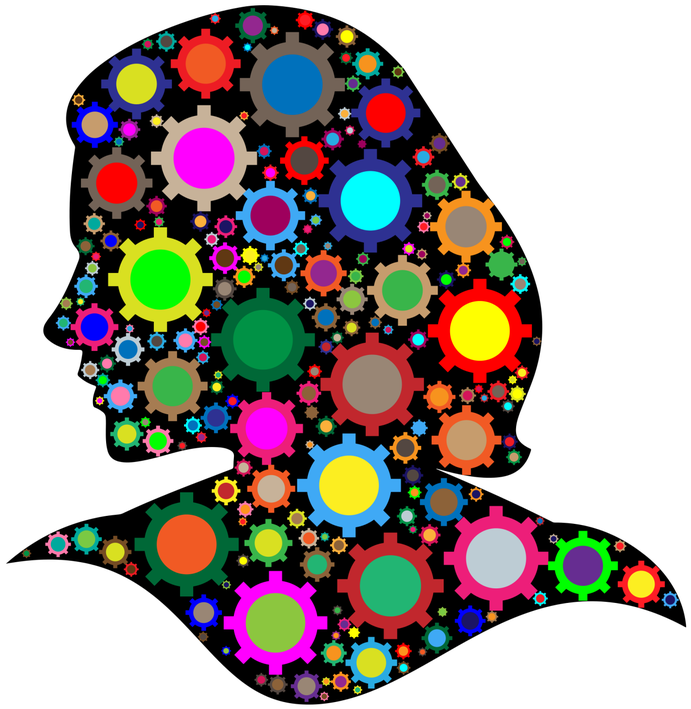
Artificial Intelligence

Using technology to imitate human intelligence.



Let’s start with human intelligence…

What does it mean to you?



Let’s take a closer look at one example of intelligence...

Learning!

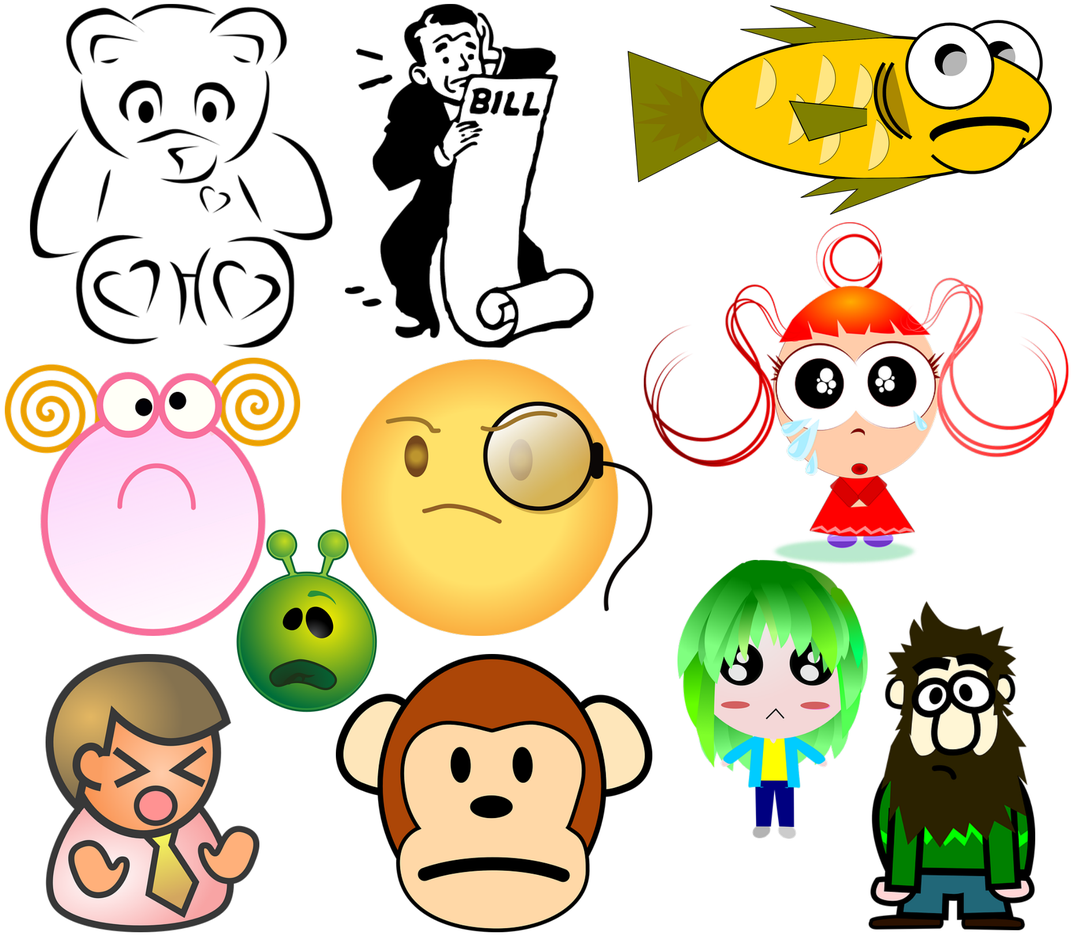
Activity

Experience “Learning”

- On the next slide, you’ll see 2 groups of pictures: Group A and Group B.
- Take a few moments to study Group A and Group B.

A

B

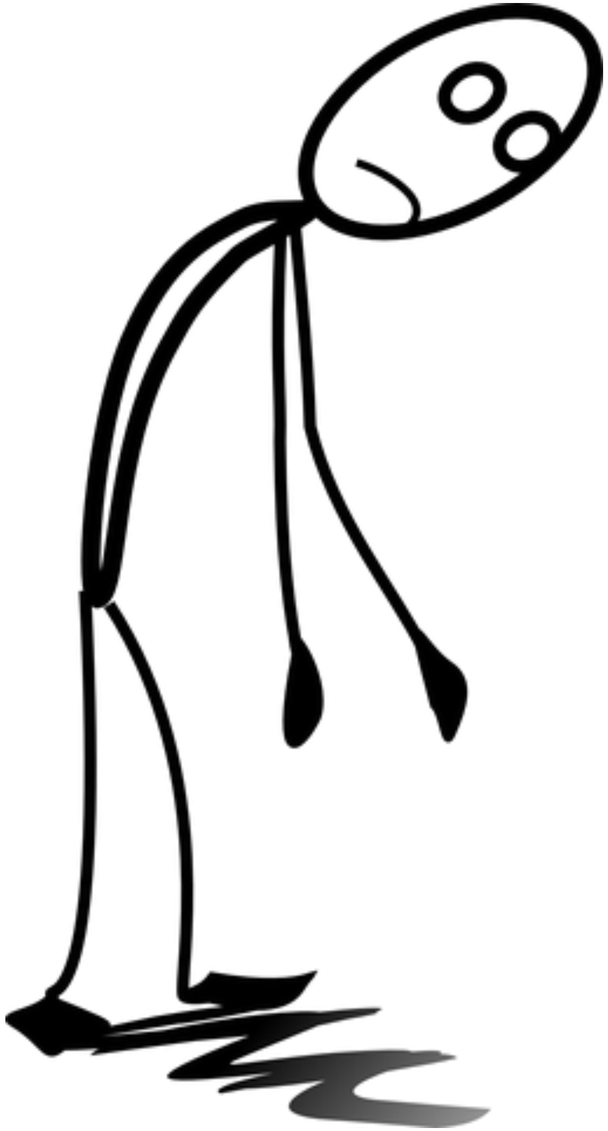


Activity

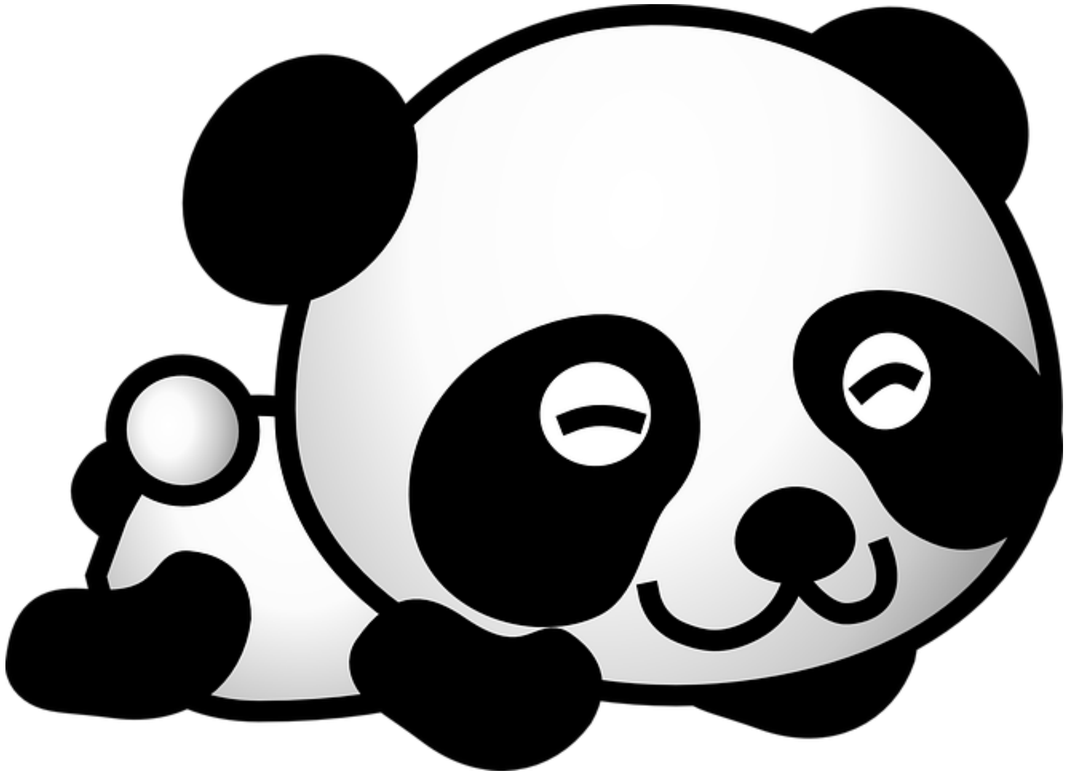
Experience “Learning”

On the next few slides, **classify** the image as A or B.

A



B



A

B

B

A

How did you **learn** to complete this **classification**?

Find patterns in the **examples**.

Apply the patterns you learned to classify new images.

A

The way that Artificial Intelligence imitates your learning is called **Machine Learning**.

Let’s see how machine learning works.

Find patterns in the **examples**.

Train a Machine Learning model using **training data**.

Find patterns in the **examples**.

A

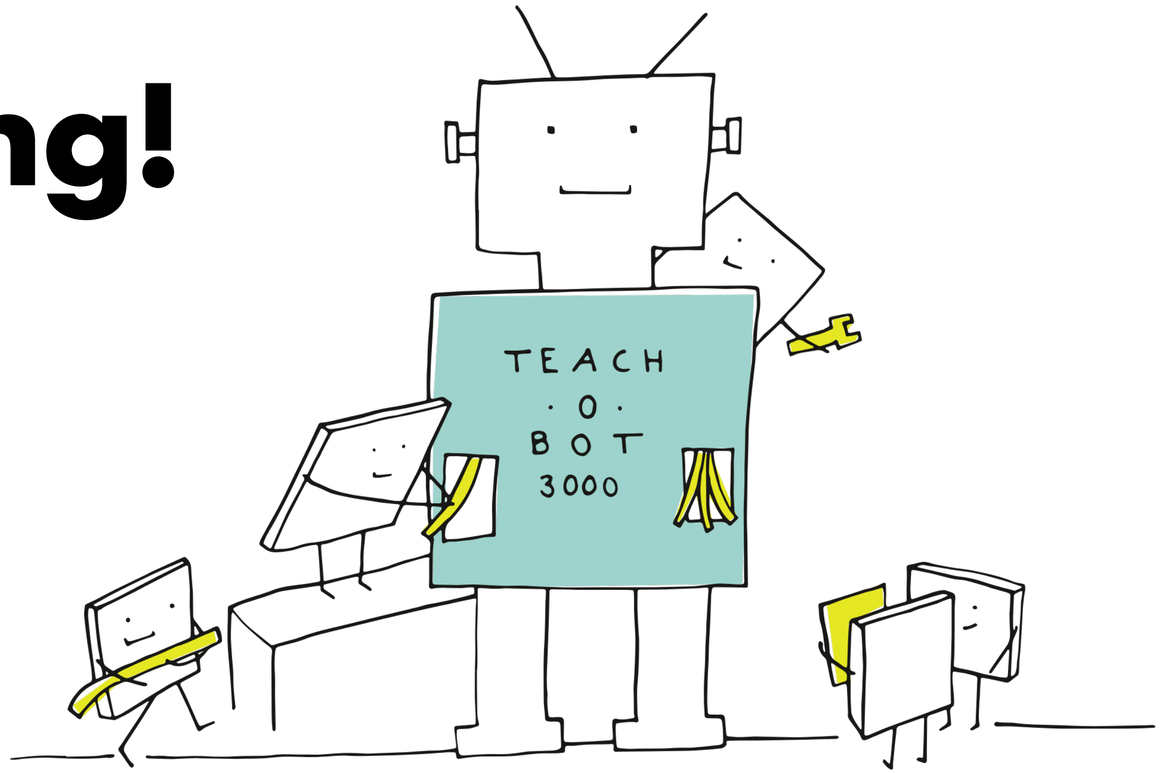
Apply the trained machine learning model on **test data**.

Demo

Train a ML Model to Play Rock, Paper, Scissors

Teachable Machine by Google

Most mentions of AI is directly referring to Machine Learning!



Questions

AI + Conversations = ???

Conversational AI

Using AI to enable conversational experiences.

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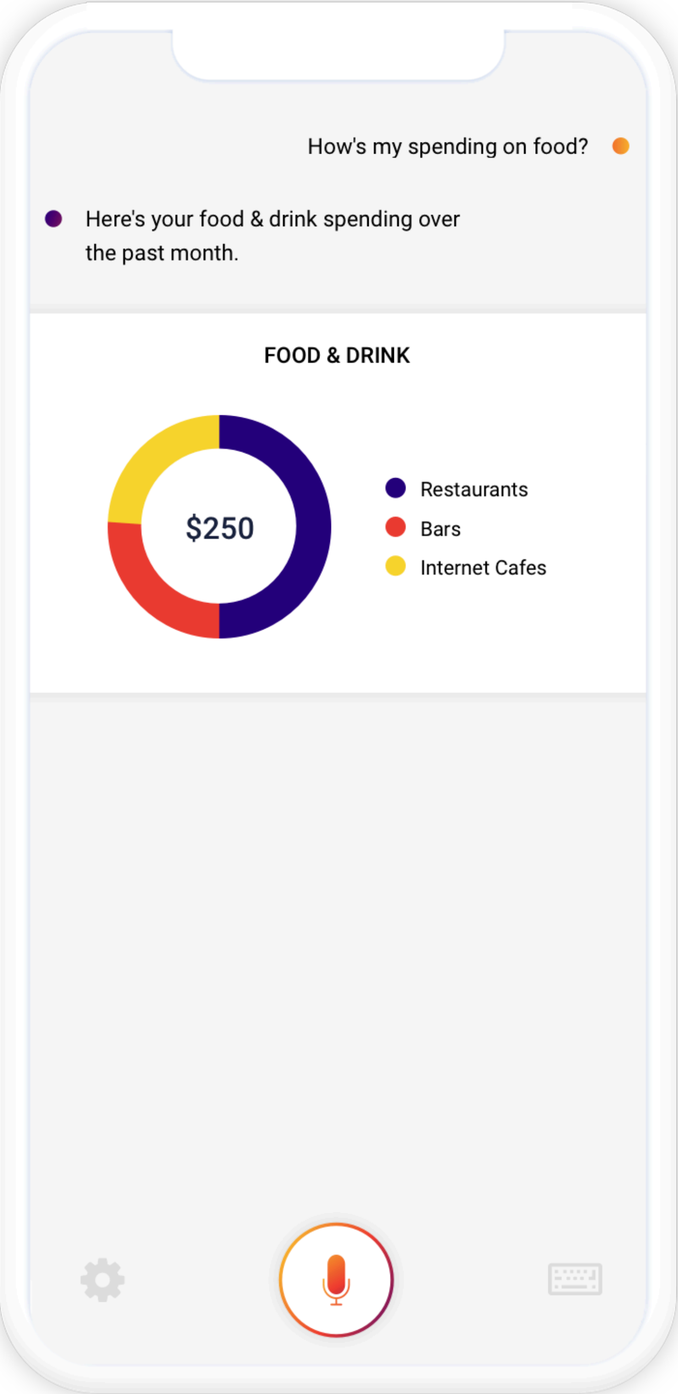
Demo

Finie the Financial Genie

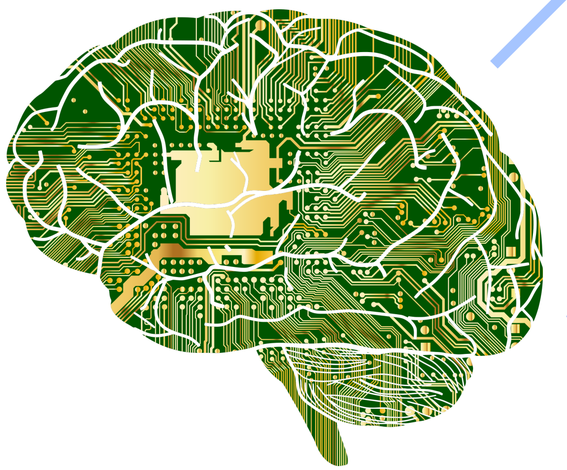


AI is used to imitate how humans interact during conversations.

For example, a machine learning model predicts the <u>**intent**</u> of your queries.

Intent Classification

Using AI to classify user intent.



dance_moves_start

- Show me your moves
- What kind of dance moves you got
- Do the dance
- Please show us the dance again

color_start

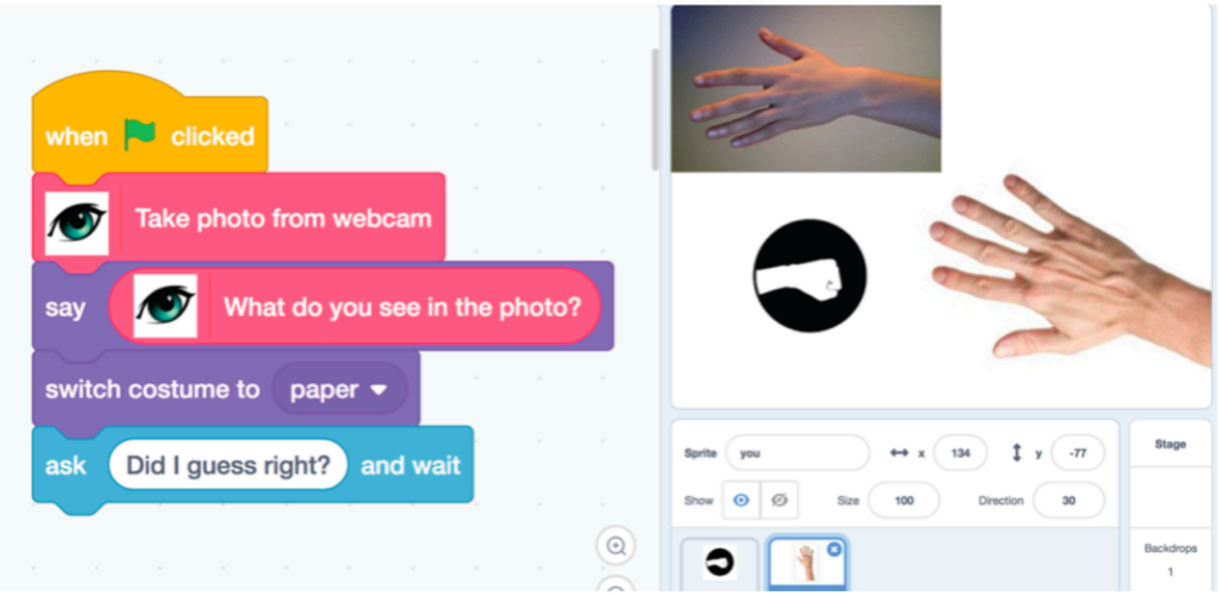
- What's your favorite color?
- Do you like blue?
- Is your favorite color pink?
- What colors do you like?

name_start

- What's your name?
- Who are you?
- What should I call you?
- Can you introduce yourself?

Demo

Ollie Owl the Teaching Assistant



Tinkering and coding AI with cognimates.me

Other uses of AI in conversations

Slot Value Pairing

Amount
Origin
Destination

- $100
- I would like to transfer $100 from checking to savings
- Send $200 from savings to checking
- The destination will be savings
- Let’s transfer $1,000.
- Let's transfer some cash!
- transfer $19,999 between my accounts
- let's transfer $20,000.00 to my savings
- transfer 30 bucks from my savings to the other account
- transfer money from checking to savings

Slot Mapping

“Cheking”

Checking **Savings**

Questions

Where to learn more about AI?

If you like taking online courses...

- deeplearning.ai (https://www.deeplearning.ai/ai-for-everyone/)
- fast.ai (https://course.fast.ai/)
- Harvard CS50 (https://cs50.harvard.edu/ai/2020/)

If you like building stuff...

- Kaggle (https://www.kaggle.com/learn/overview)
- Driven Data (https://www.drivendata.org/competitions/)

If you like social media...

- Towards Data Science (@TDataScience)
- Cassie Kozyrkov (@quaesita)
- Andrew Ng (@AndrewYNg)

Questions

Thanks!

Materials from this talk will be posted on GitHub.
Feel free to reach out on LinkedIn (albemlee) or email (albert.lee@clinc.com)