

**Anyone can be  
an artist today**

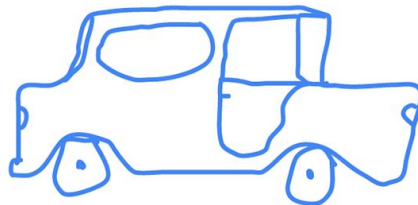
**Zhibang Chen  
Feb 27th, 2018**

# What Is AutoDraw?

# Google's Creative Lab's newest product

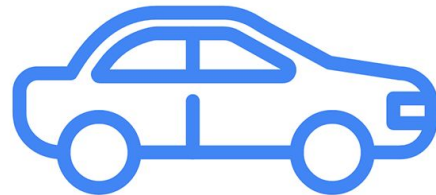
- AutoDraw is a web-based app powered by machine learning.
- With that technology, AutoDraw can recognise your drawings, and smartly replace it with alternatives created by artists.
- Let's Try It Out!  
<https://www.autodraw.com/>

AutoDraw



**Before**

Do you mean:



**After**

# How Does Google AutoDraw Work?

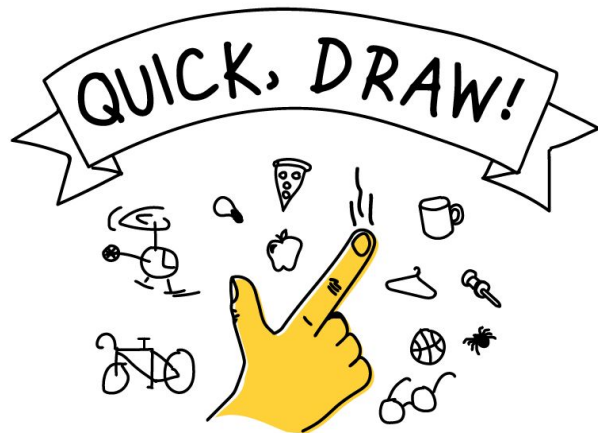
# Step One

- For years, Google Translate has been developing handwriting recognition in its app.
- Recognising handwriting is relatively simple - people tend to draw letters by making similar strokes in roughly the same order and direction.



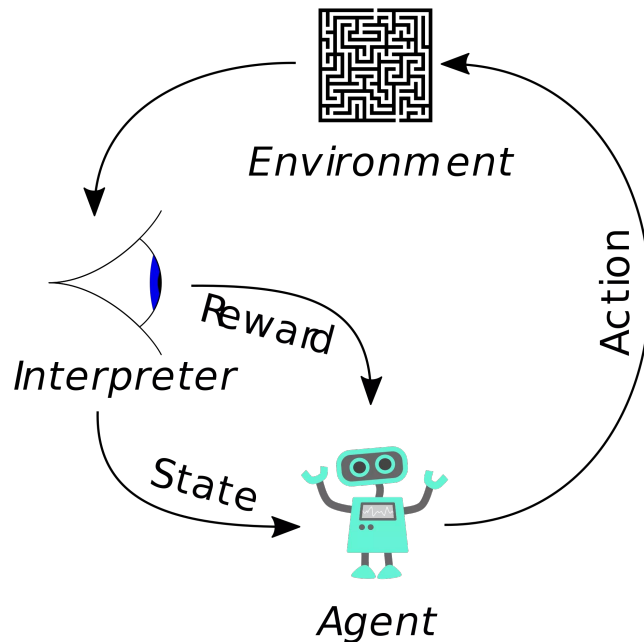
# Step Two

- Then, in November, Google's Creative Lab released a game called Quick, Draw! It challenges players to draw something and have a neural network guess what it is.
- The development group explained that their goal was to build the world's largest doodle dataset.
- Let's try Quick, Draw!  
<https://quickdraw.withgoogle.com/>



# Step Three

- First, AutoDraw uses its database of Quick, Draw! to recognise what you're trying to draw.
- Then it goes through the library to find other drawings is similar to yours.
- If you pick one, that's positive feedback for the algorithm. If you pass over it entirely, that's negative feedback.

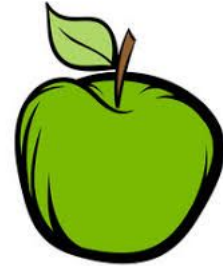
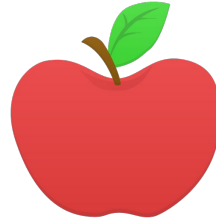


Do You Know What Kind of  
Machine Learning Algorithms  
It Is Using?

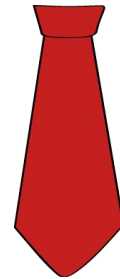


Let's Also Talk About 3 Basic  
Concepts of Artificial  
Intelligence!

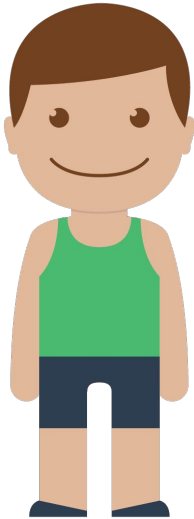
# Supervised Learning



# Unsupervised Learning



# Reinforcement Learning



It Is A Kind of Reinforcement  
Learning!

Thank you!