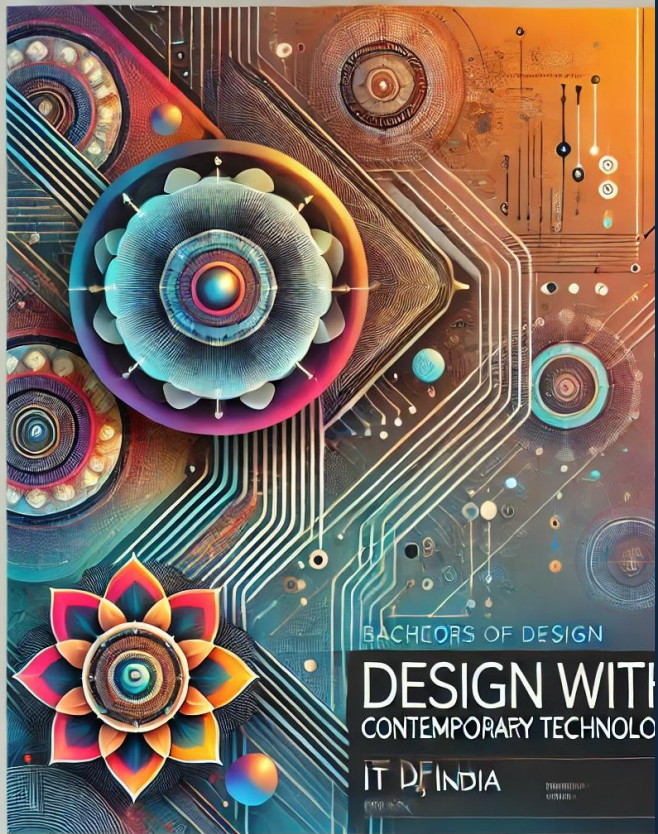




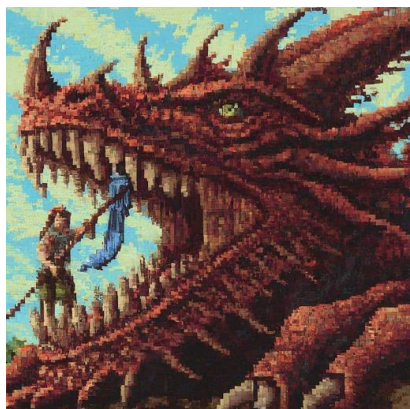
AI in Design

Jay Dhariwal
Associate Professor,
Department of Design
IIT Delhi



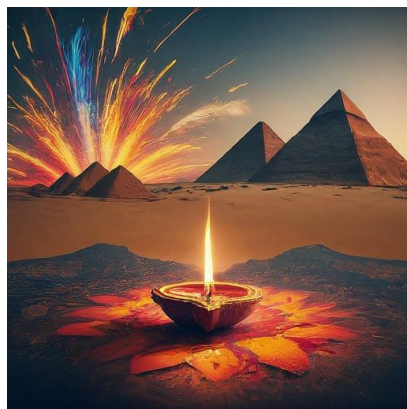
DALL-E

[Can you generate an AI image?](#)



PROMPT

Cleaning the teeth
of a dragon with a
mop



PROMPT

Generate Diwali
greeting images
being celebrated
in Egypt with
firecrackers in
foreground and
Pyramids in
background



PROMPT

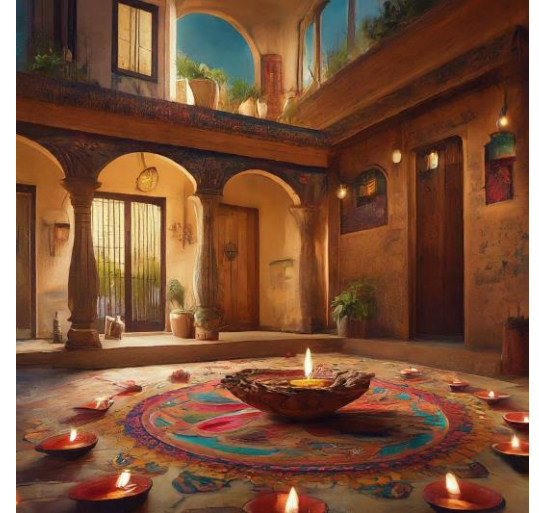
A scooter made of
ice to beat the
harsh hot climate
of Delhi



PROMPT

Create an image
of a majestic
gorilla in a desert
landscape

Topic 1: Fun with AI



Rajat Dhariwal Talk (Aug 2024)

AI in Design Education

Become a 10x Designer

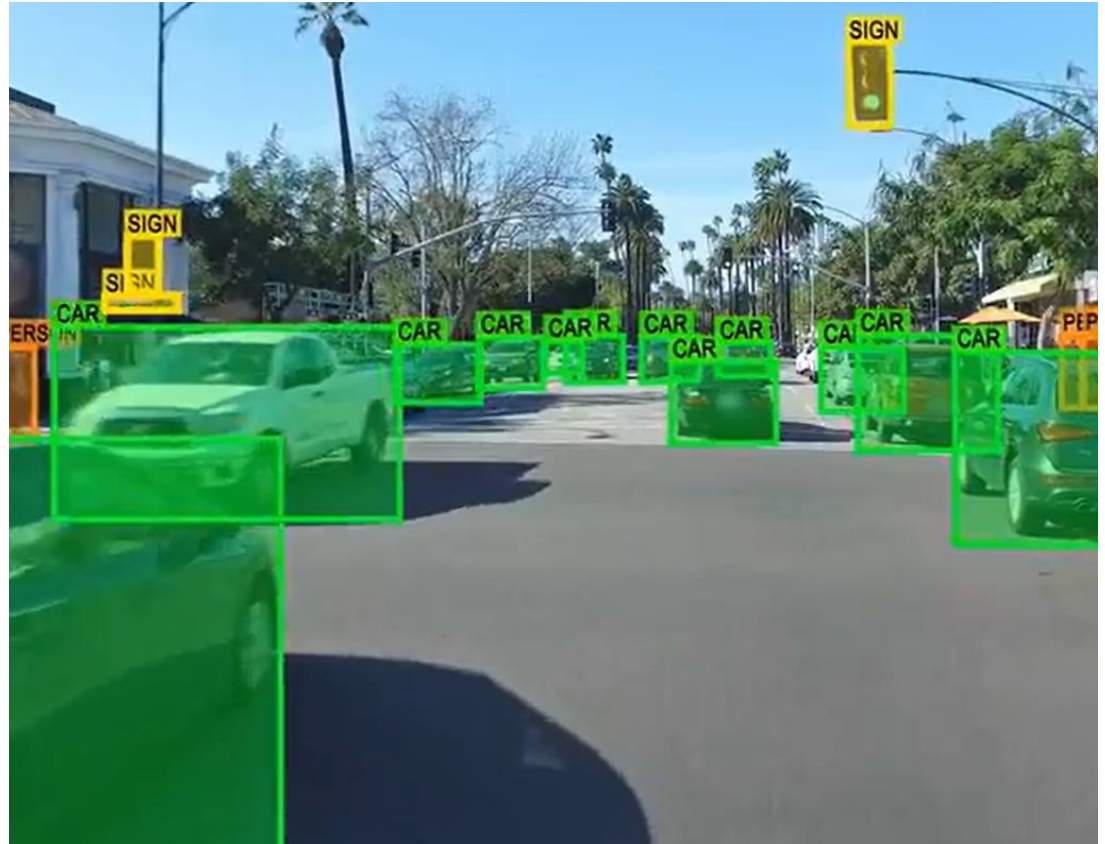
Have you used ML before?

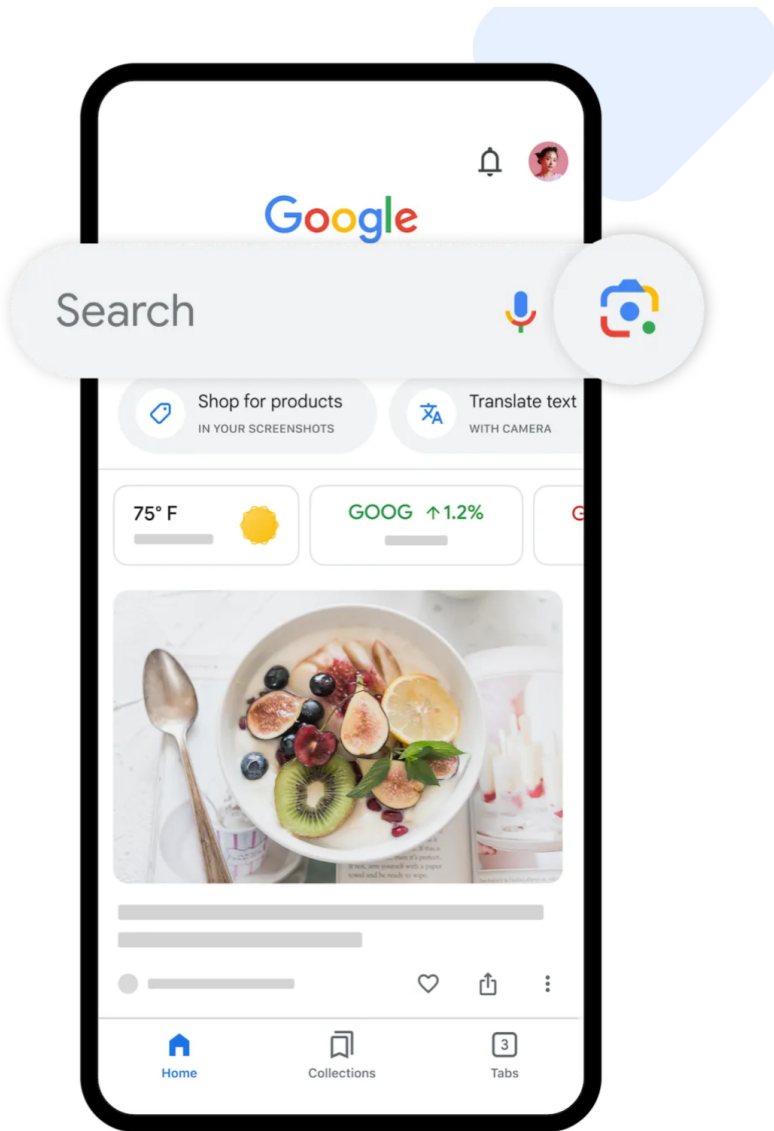
- Siri, Google Assistant, Alexa.
- Amazon suggestions to buy stuff, Film suggestions on Netflix



Why should you care about ML?

- [Google's AI AlphaGo Is Beating Humanity At Its Own Games](#)
- Eric Schimdt: Former Chairman, Alphabet (parent company of Google): Self Driving Cars are the future, AI assisted health care.
- Vinod Khosla about Generative Design (CAD+AI). [Bike example](#)





Try Google Lens

Look for Lens in the search bar of the Google app

Scan to get the app



Generating Logo with AI (TurboLogo)

- Company Name
Prompt: Open
Source Carbon
Footprint Calculator
- Slogan: Making Net
Zero Carbon Human
Beings Possible



Google Teachable Machines

The image shows the Google Teachable Machines web interface. On the left, there are two class cards. The first card is for 'Jay' and contains 117 image samples. The second card is for 'Payal' and contains 132 image samples. Each card has a 'Webcam' button and an 'Upload' button. Below these cards is a dashed box with a plus icon and the text 'Add a class'. In the center, there is a 'Training' panel with a 'Train Model' button and an 'Advanced' dropdown menu. On the right, there is a 'Preview' panel. The 'Preview' panel has a toggle switch for 'Input' set to 'ON' and a dropdown menu for 'Webcam'. Below this is a video feed showing a person's face. At the bottom of the 'Preview' panel, there is an 'Output' section with two rows: 'Class 1' with a progress bar at 100% and 'Class 2' with a progress bar at 0%.

Jay

117 Image Samples

Webcam Upload

Payal

132 Image Samples

Webcam Upload

Add a class

Training

Train Model

Advanced

Preview Export Model

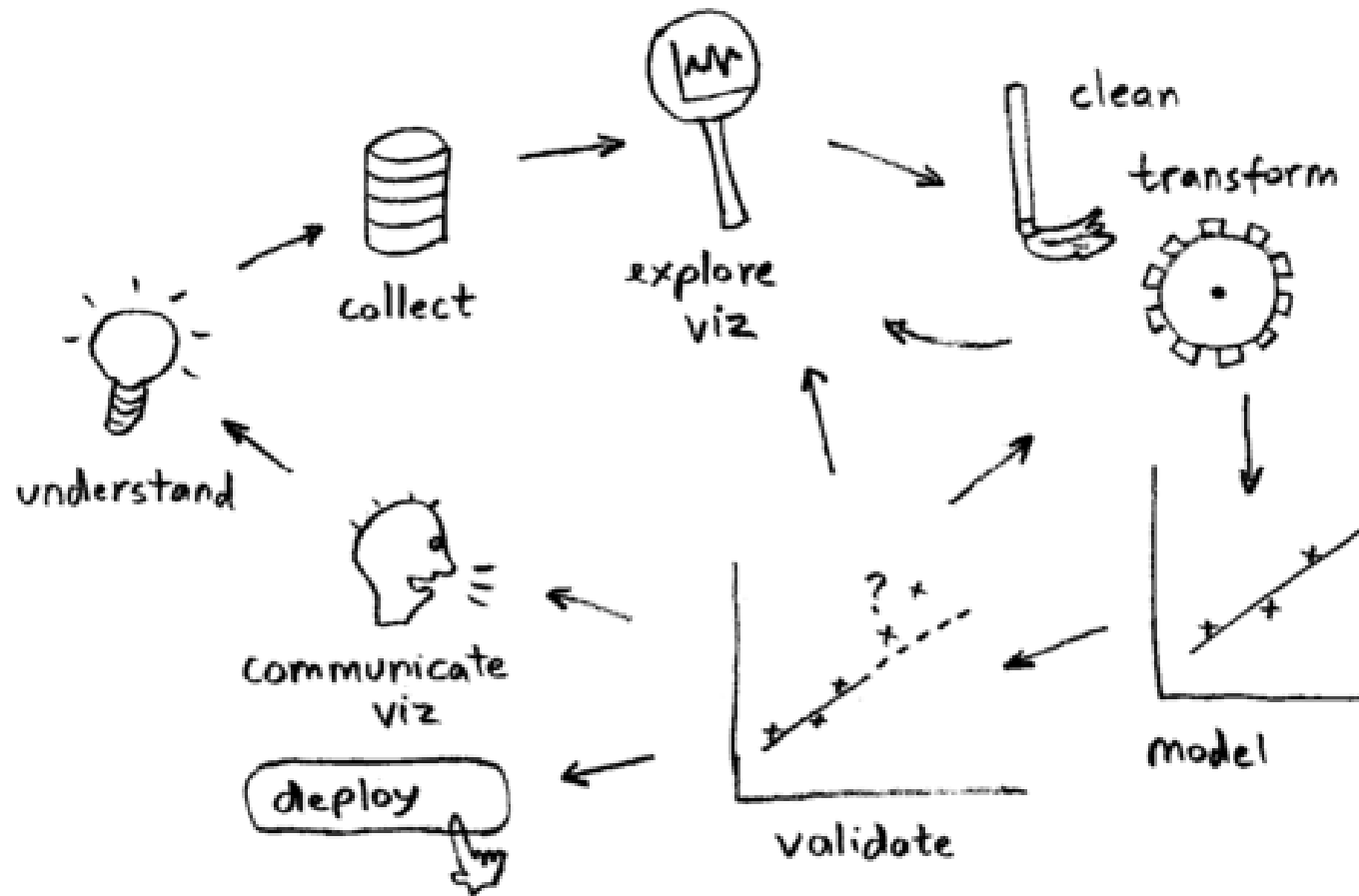
Input ON Webcam

Output

Class 1 100%

Class 2

Data science workflow



- Source: <http://datascience.la/data-science-toolbox-survey-results-surprise-r-and-python-win/>

Assignment 1: AI for Designers

Marks: 10 Expected Time for the exercise: 6 hours

- Explore an AI application out there in the world (besides what has been covered in the class). Write about what does this application do? Provide a demo (video/screenshots) of it. (2.5 marks)
- Use Google Teachable Machines to build a novel ML model. What are the use cases of this application? Provide the html file and a demo (video/screenshots) of it. (2.5 marks)
- Essay on AI in Design Education (Ethics, Future). (2.5 marks)
- MIT App Inventor App using AI (2.5 marks)