Machine Learning applicability in India

Akshay Bahadur

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TFUG Chennai

Acknowledgement

Akshay Bahadur

- SDE – Symantec

- Intel Software Innovator

- Google Developer Expert
  (Machine Learning)

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Inspiration

Tania’s Story

Important Link

- bit.ly/tfug-chennai

Artificial Intelligence

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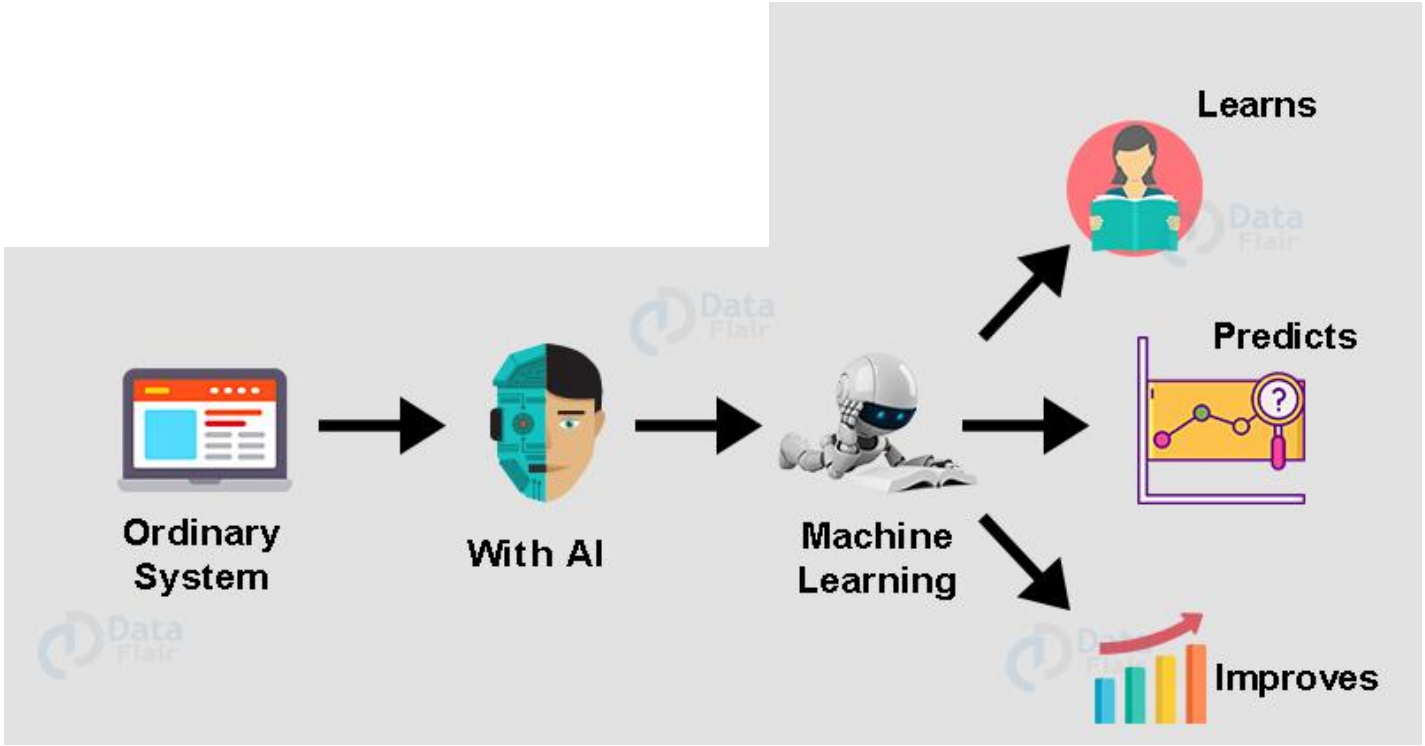
Machine Learning

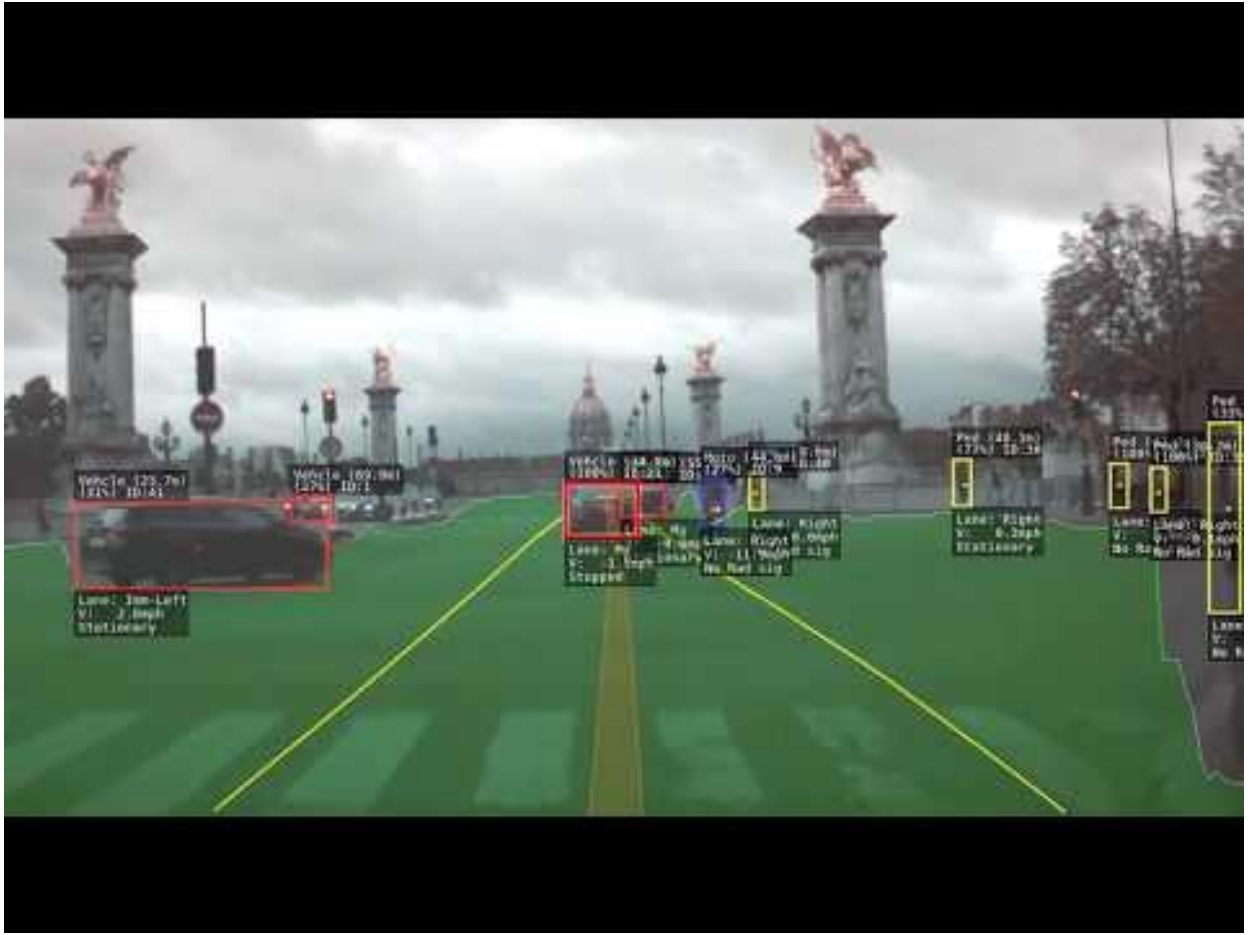


Machine Learning

- Learn
- Improve
- Predict

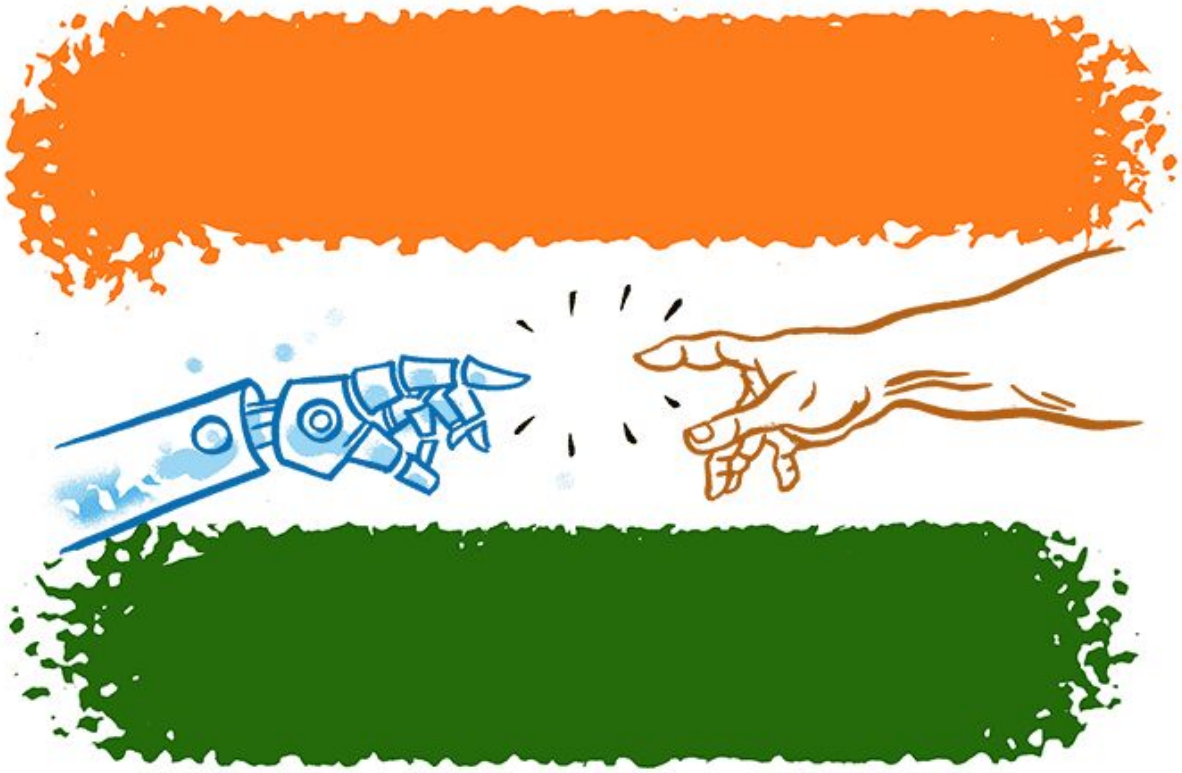
Applications


CNBC
THIS ROBOT KILLS YOUR WEEDS




Source Video
Detected Pose
Source to Target 1 Result
Source to Target 2 Result

Artificial Intelligence in India



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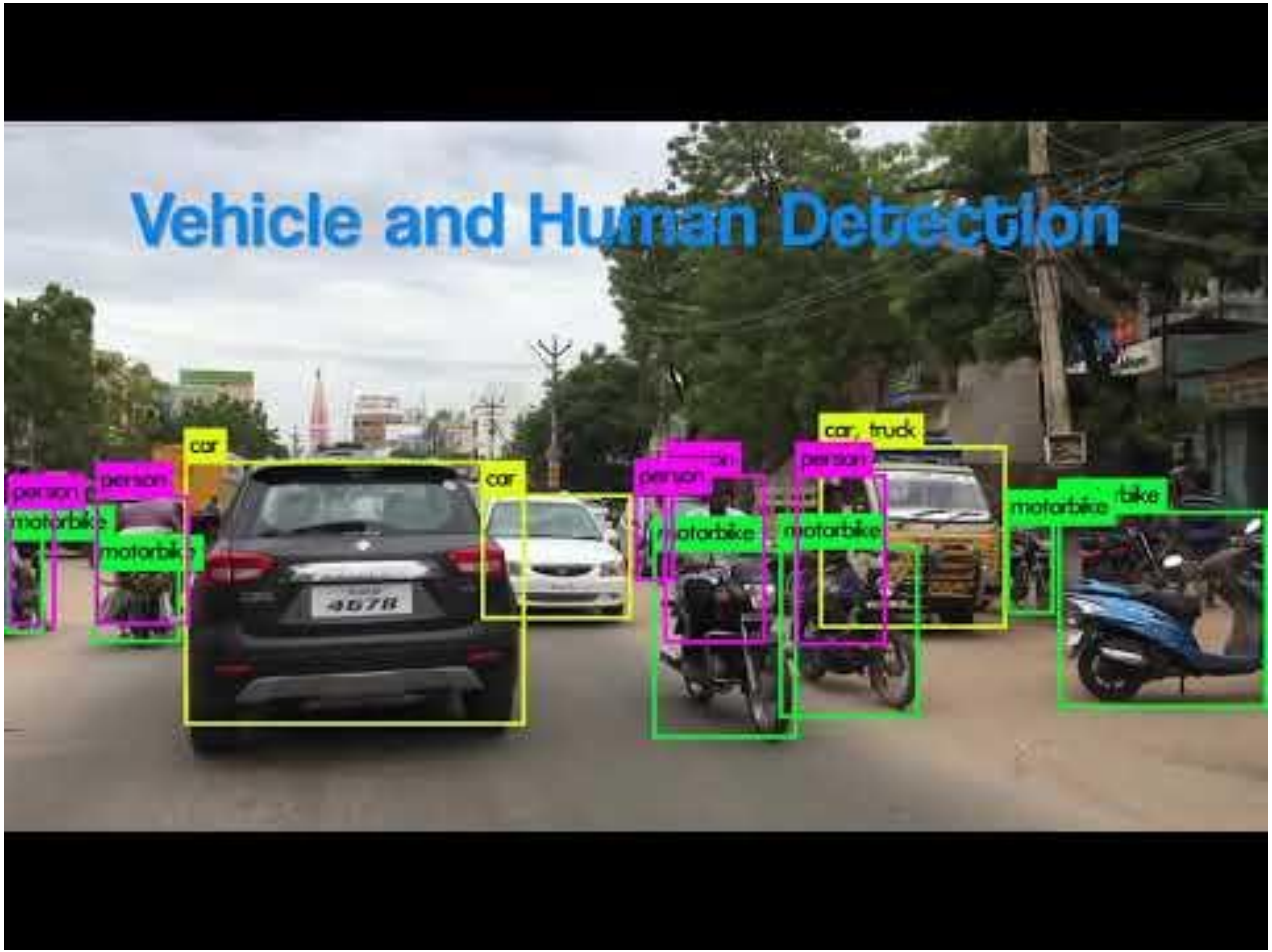
Vehicle and Human Detection
car
car
car, truck
person
person
person
person
motorbike
motorbike
motorbike
motorbike
motorbike
bike

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The Journey

- **BTECH -** Symbiosis Institute of Technology

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- **Netcracker Tech -** Java Developer

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- **Symantec -** Big Data

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The Path

Open Source Contributions

Can a neural network learn to recognize doodling?

Help teach it by adding your drawings to the world's largest doodling data set, shared publicly to help with machine learning research.

Let's Draw!

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End to End Learning for Self-Driving Cars

Mariusz Bojarski
NVIDIA Corporation
Holmdel, NJ 07735

Davide Del Testa
NVIDIA Corporation
Holmdel, NJ 07735

Daniel Dworakowski
NVIDIA Corporation
Holmdel, NJ 07735

Bernhard Firner
NVIDIA Corporation
Holmdel, NJ 07735

Beat Flepp
NVIDIA Corporation
Holmdel, NJ 07735

Prasoon Goyal
NVIDIA Corporation
Holmdel, NJ 07735

Lawrence D. Jackel
NVIDIA Corporation
Holmdel, NJ 07735

Mathew Monfort
NVIDIA Corporation
Holmdel, NJ 07735

Urs Muller
NVIDIA Corporation
Holmdel, NJ 07735

Jiakai Zhang
NVIDIA Corporation
Holmdel, NJ 07735

Xin Zhang
NVIDIA Corporation
Holmdel, NJ 07735

Jake Zhao
NVIDIA Corporation
Holmdel, NJ 07735

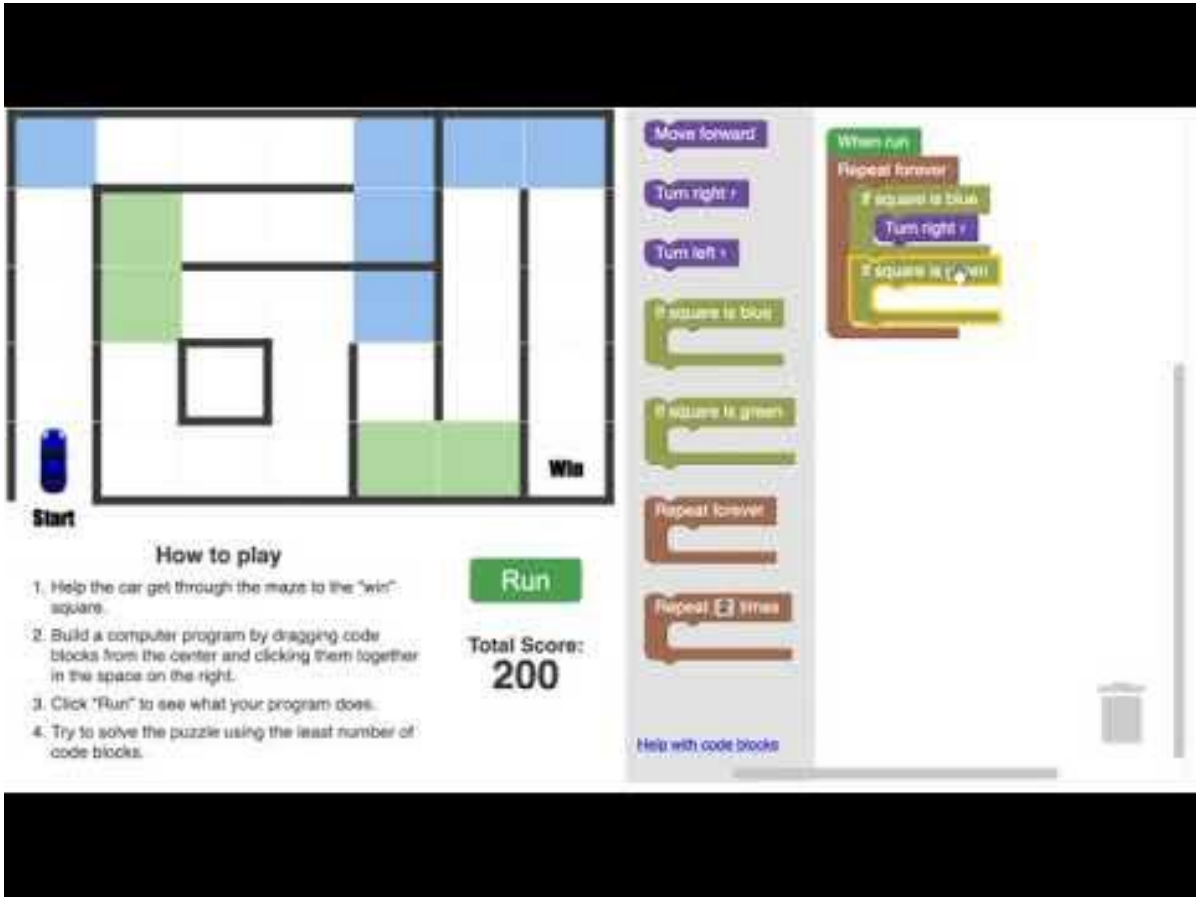
Karol Zieba
NVIDIA Corporation
Holmdel, NJ 07735

Three aspects of a great Presentation

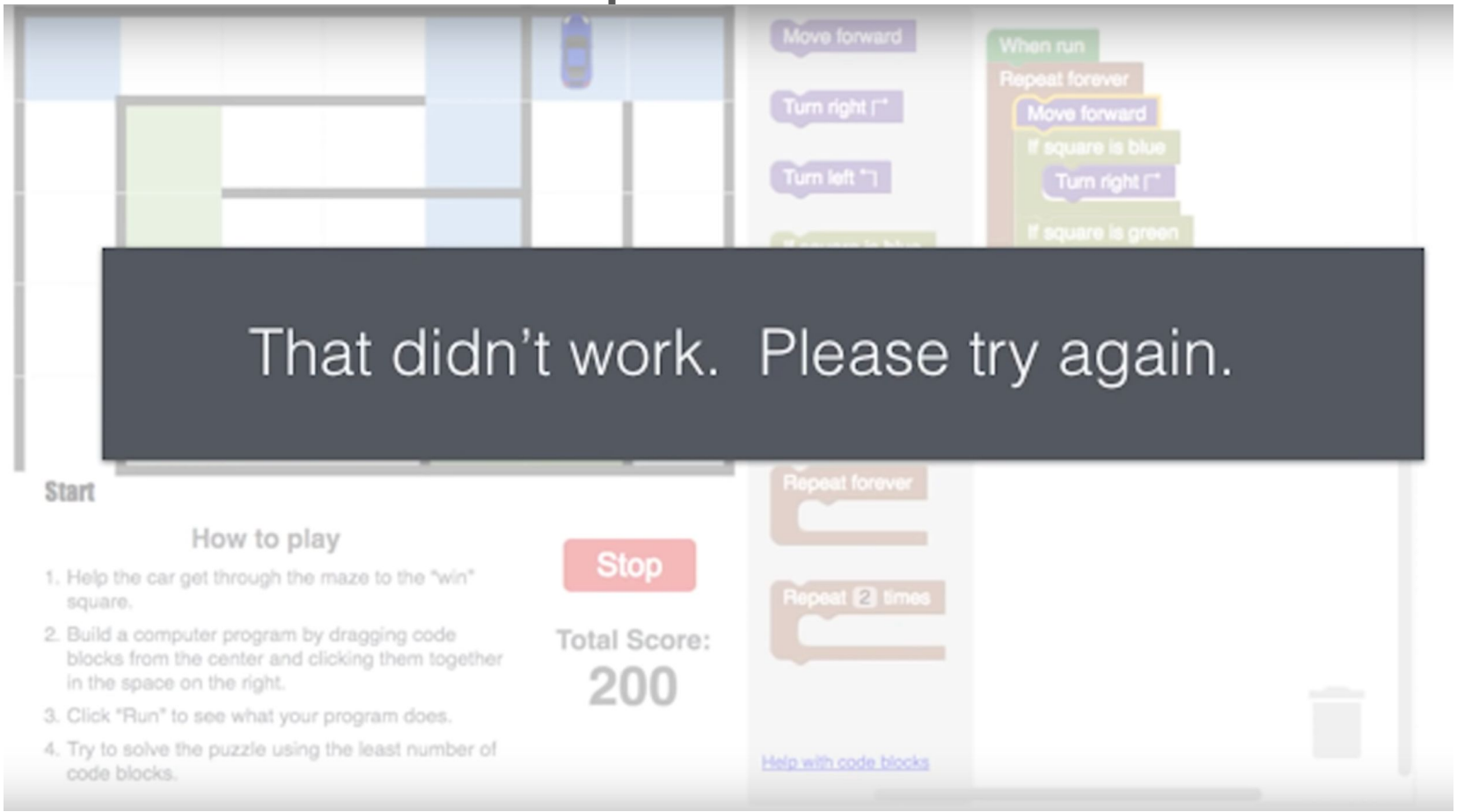
- Content
- Story
- Takeaway

Takeaway

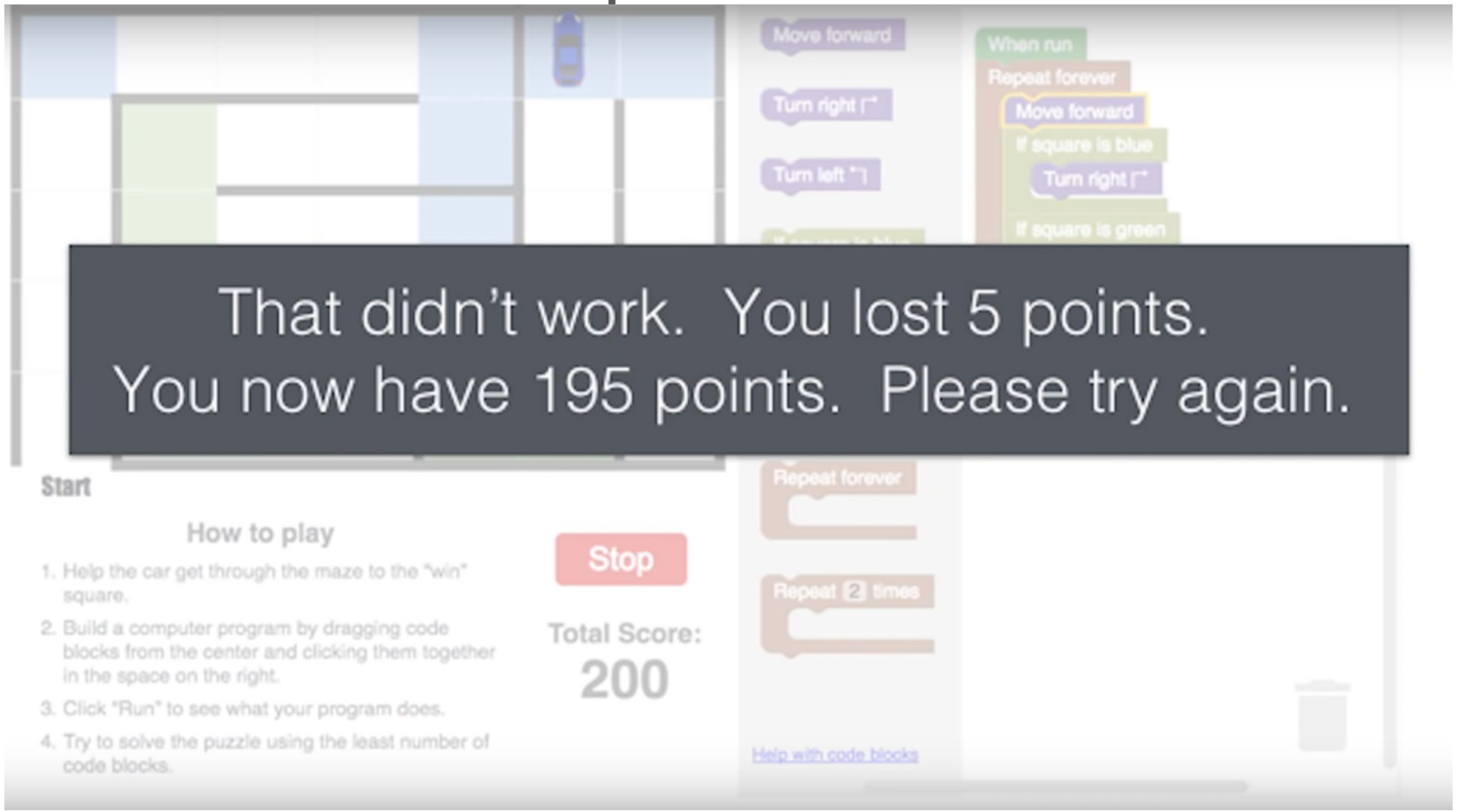
Mark Rober's Experiment



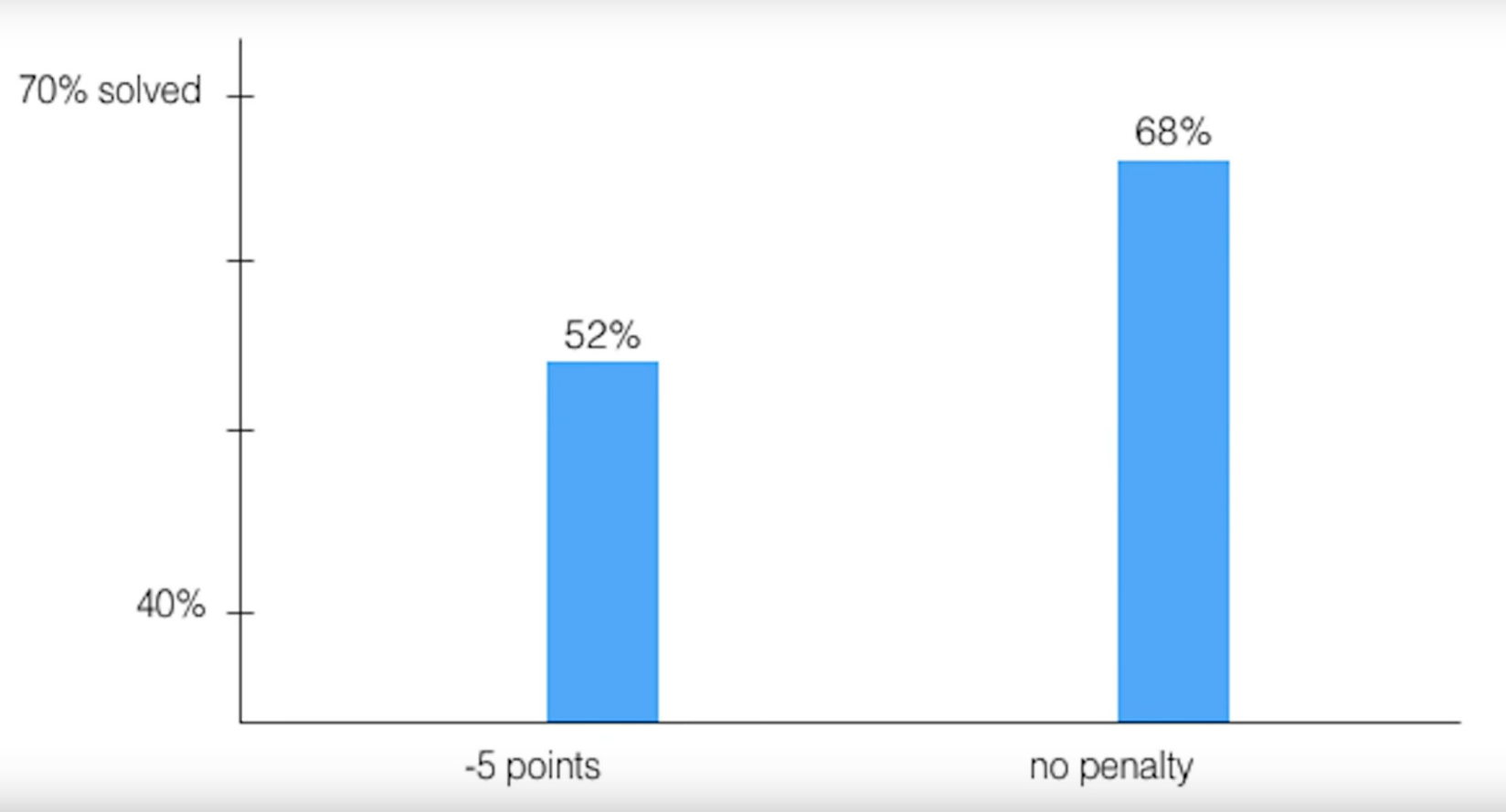
Mark Rober's Experiment



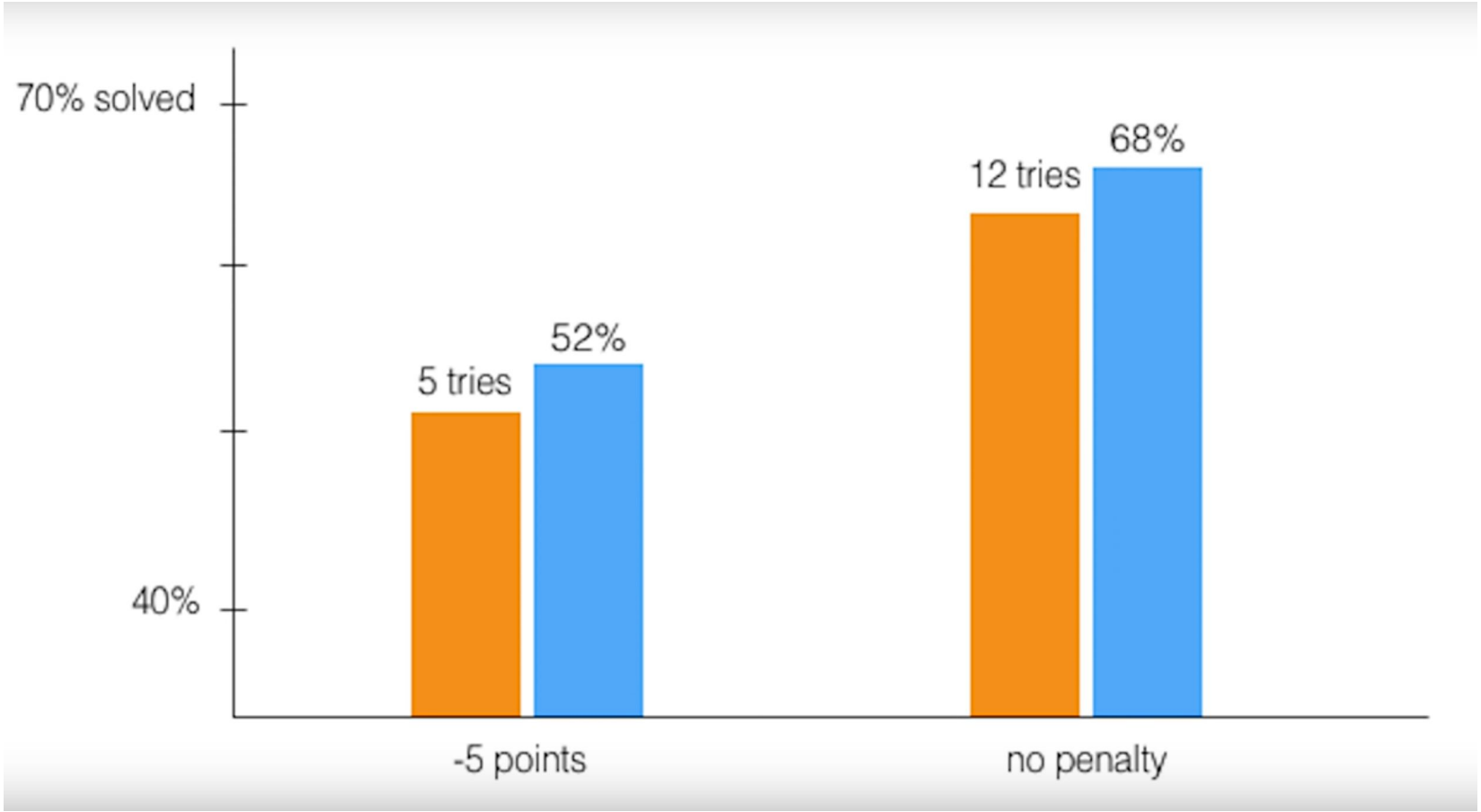
Mark Rober's Experiment



Mark Rober's Experiment



Mark Rober's Experiment



Adding it up

- Don’t think

- Just Do

Indian Sign Language Recognition(ISLAR)

Problem Statement

- **14,000,000** people in India have speech/hearing impairment
- **80kms** – Distance b/w Mumbai and Pune; also the distance within which variances in signs become noticeable - ‘Sign Language’ becomes ‘Sign Languages’

Ideal Solution

- **Standardize** ISL like the American Sign Language
- Leveraging **Artificial Intelligence** to accurately predict minute changes in signs & symbols
- Keeping **resource** intensity of the application bare minimum to ensure feasible scalability

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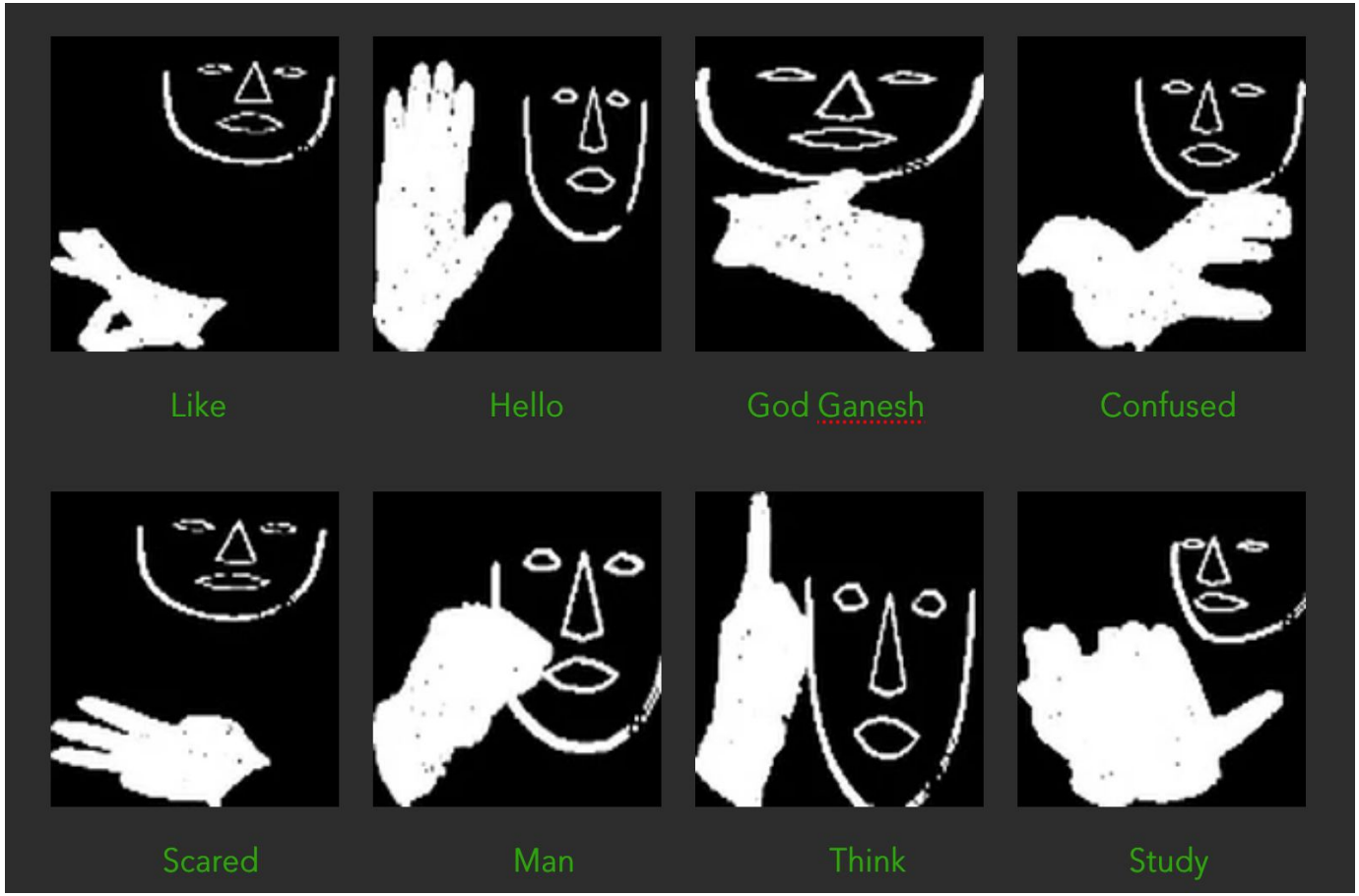

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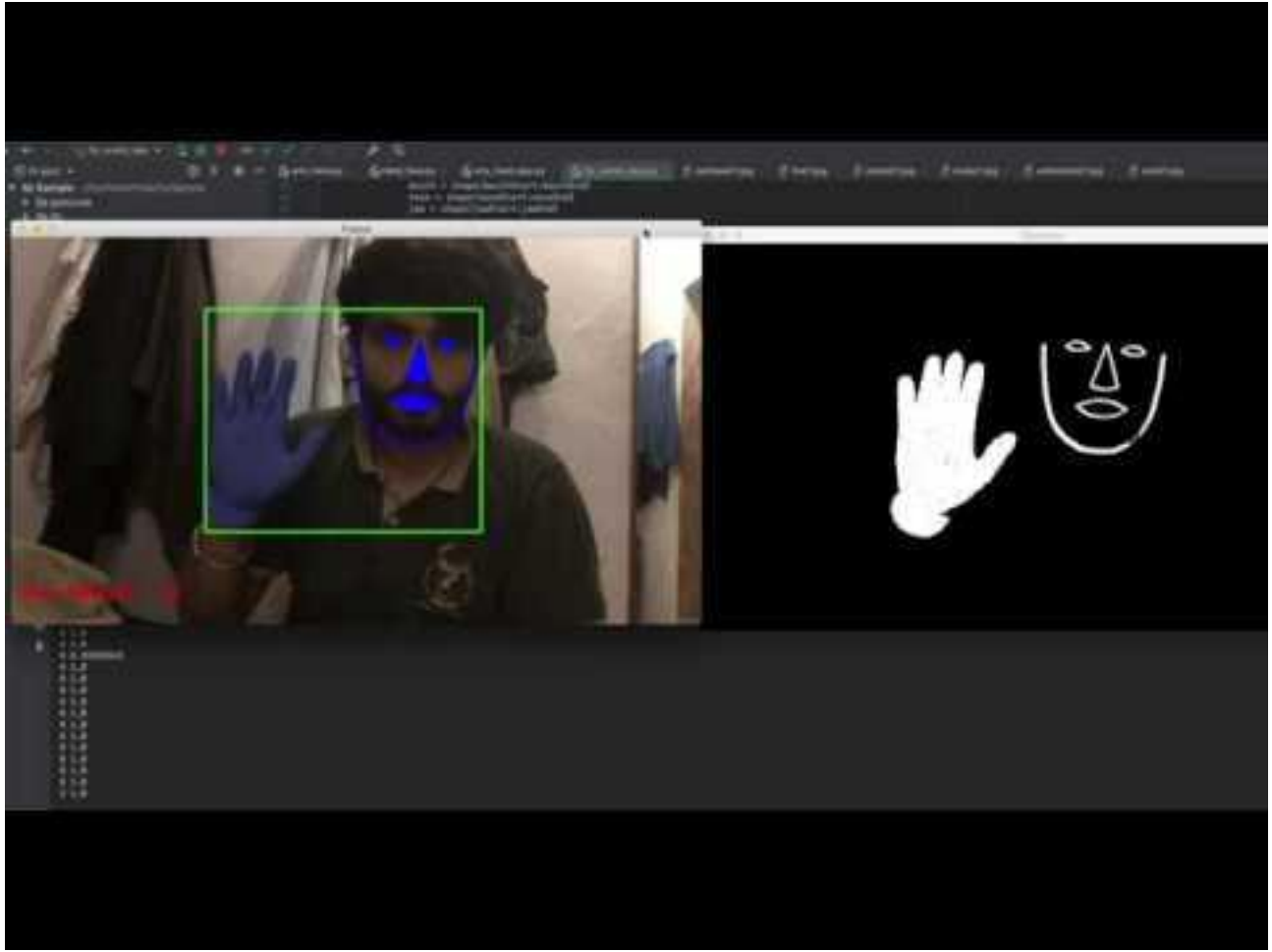

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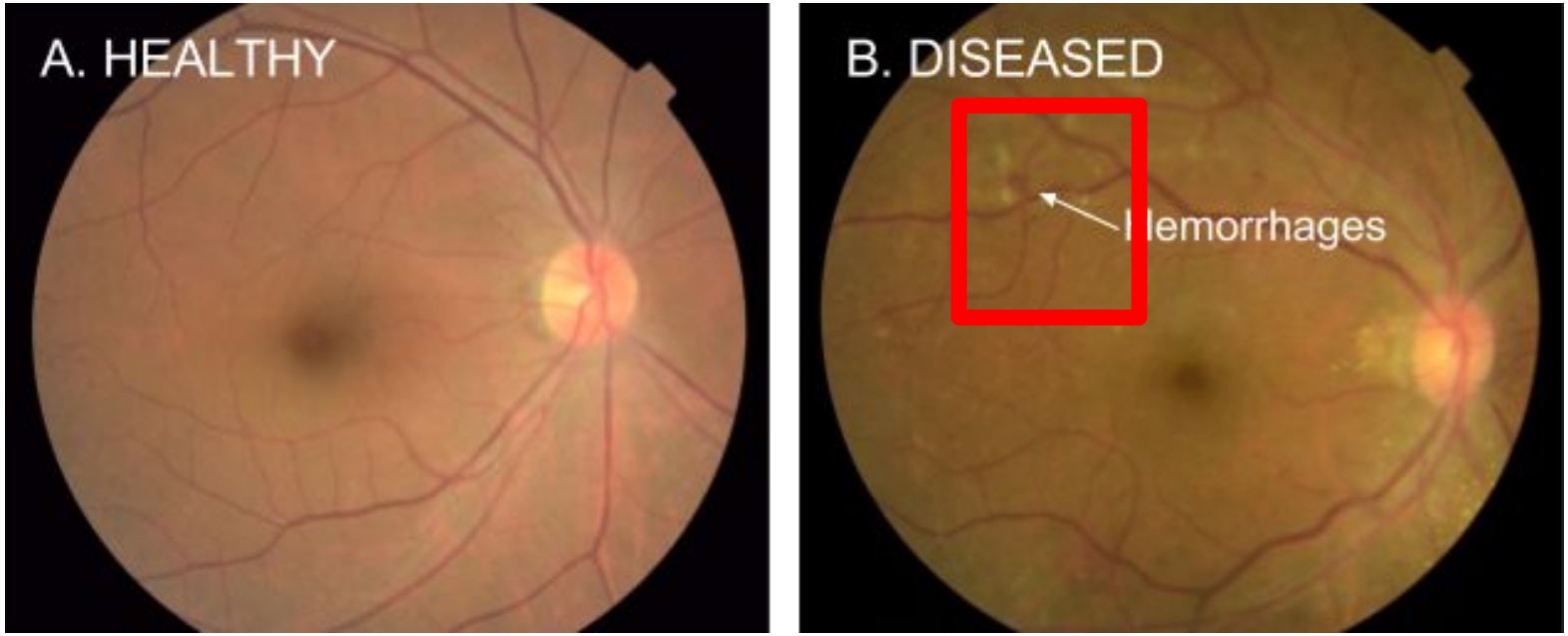
How You Could Help

- Identify Problems
- Rough Draft of the Solution
- What do you have and What do you need?
- Learn Skills and get assistance
- Start...!!!

Google AI Lab : Bangalore

- Detecting diabetic eye disease
- Flood forecasting
- Teaching kids to read

Detecting diabetic eye disease

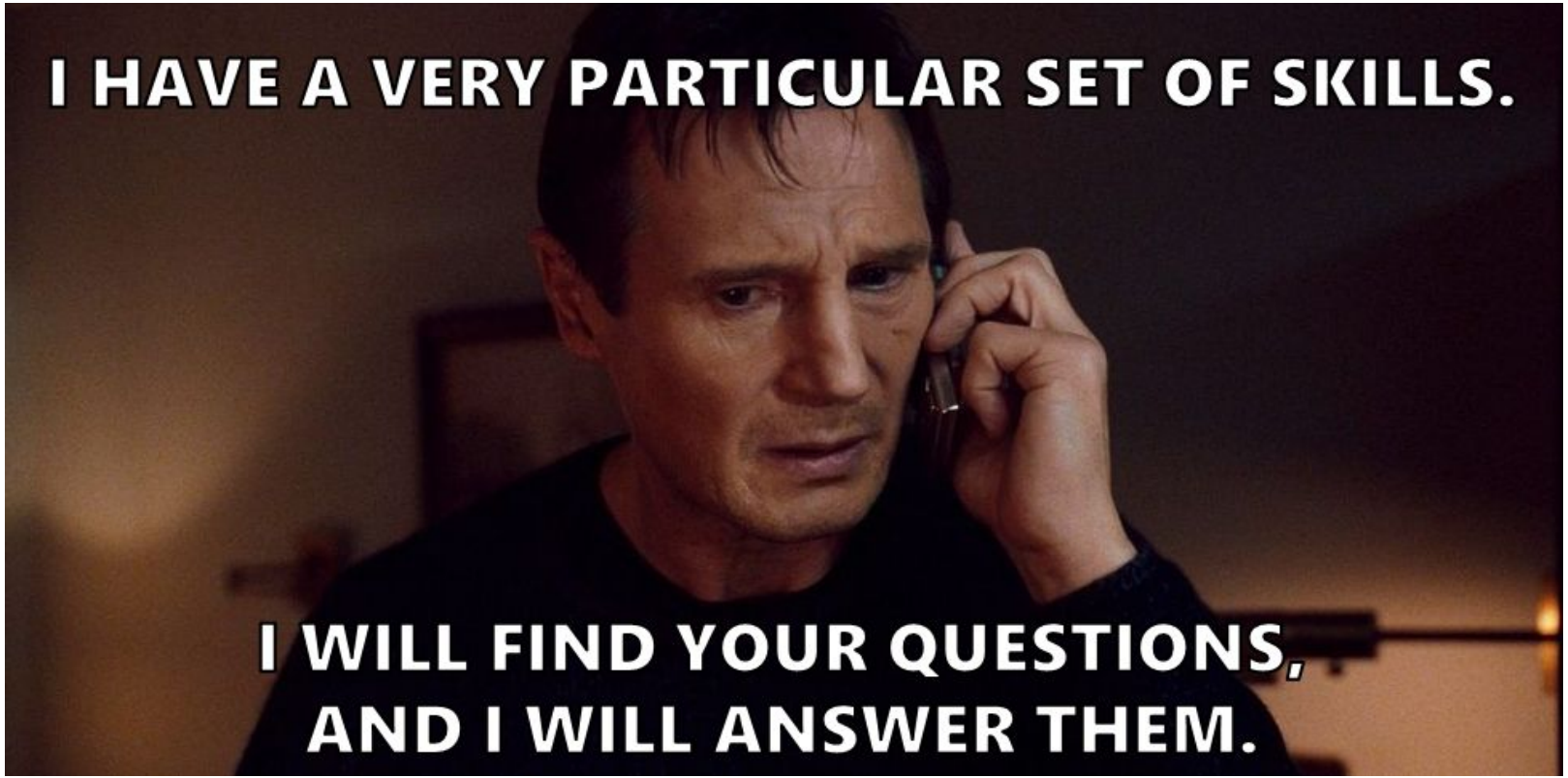

A. HEALTHY
B. DISEASED
Hemorrhages

Flood Forecasting


9:00
9:00
Tue, May 7 33°C

Teaching kids to read


bOLO
Google
bOLO



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Feedback

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See you next time

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Experts

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