TensorFlow

Teachable Machine Strikes Back

PoseNet

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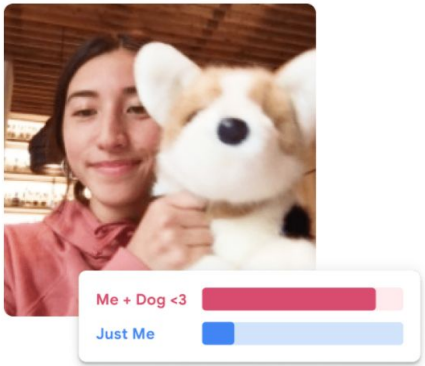
Source: Facens

Teachable Machine

Teachable Machine é uma ferramenta web para criar modelos de inteligência artificial de maneira fácil, rápida e acessível á todos.

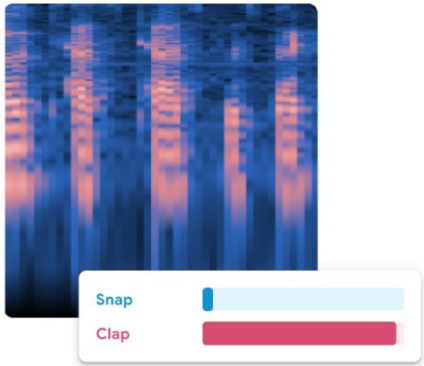
Source: Teachable Machine

O que posso fazer?



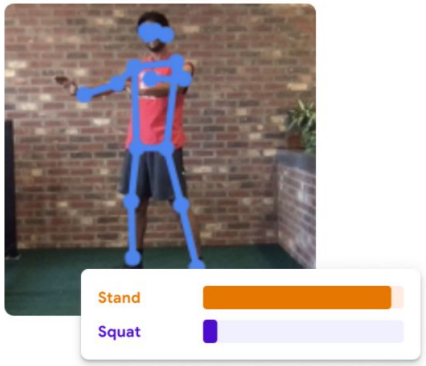
Images

Teach a model to classify images using files or your webcam.



Sounds

Teach a model to classify audio by recording short sound samples. (WAV/MP3/etc file support coming soon.)

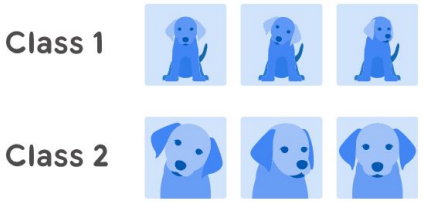


Poses

Teach a model to classify body positions using files or striking poses in your webcam.

Source: Teachable Machine

Como usar?



1 **Gather**

Gather and group your examples into classes, or categories, that you want the computer to learn.

2 **Train**

Train your model, then instantly test it out to see whether it can correctly classify new examples.

3 **Export**

Export your model for your projects: sites, apps, and more. You can download your model or host it online for free.

Source: Teachable Machine

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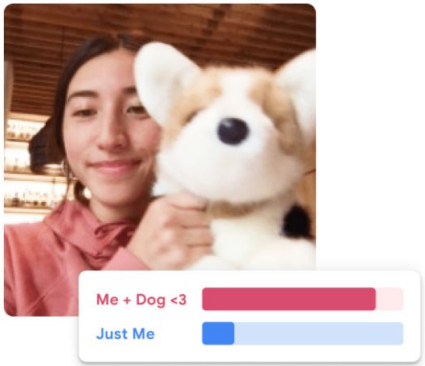

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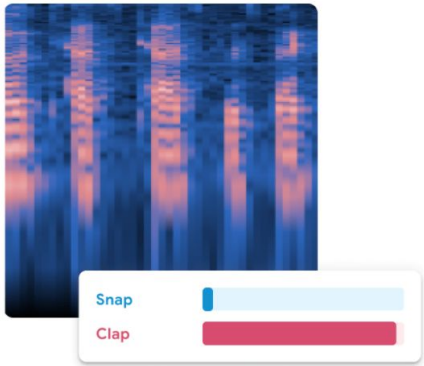

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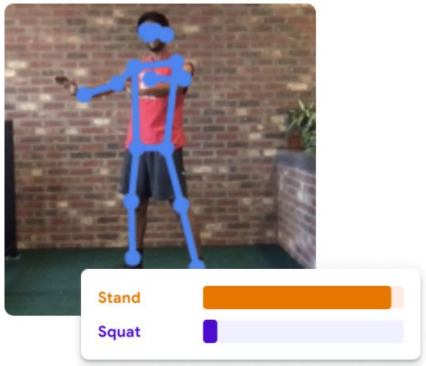

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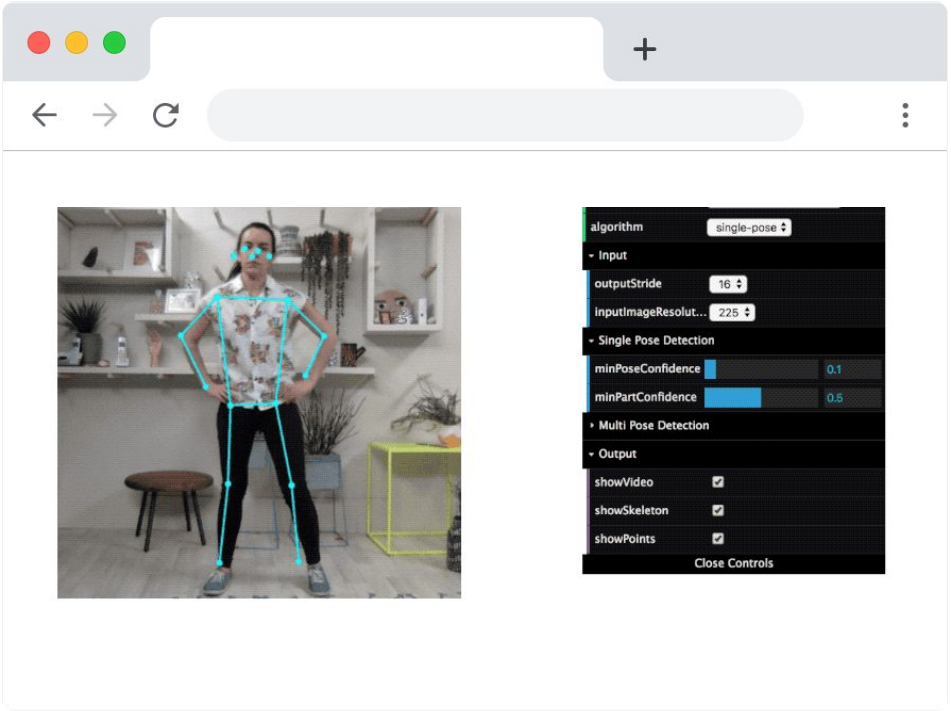
Source: Teachable Machine

DAZZY
YMCA
You can have a good meal
You can do whatever you feel

Posenet



Source: Teachable Machine

Keypoints

Id	Part
0	nose
1	leftEye
2	rightEye
3	leftEar
4	rightEar
5	leftShoulder
6	rightShoulder
7	leftElbow
8	rightElbow

Id	Part
9	leftWrist
10	rightWrist
11	leftHip
12	rightHip
13	leftKnee
14	rightKnee
15	leftAnkle
16	rightAnkle

Source: Teachable Machine

Outputs

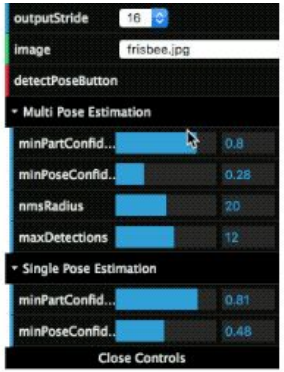

```
{
  "score": 0.32371445304906,
  "keypoints": [
    {
      "position": {
        "y": 76.291801452637,
        "x": 253.36747741699
      },
      "part": "nose",
      "score": 0.99539834260941
    },
                    ...
                                    ...
    {
      "position": {
        "y": 282.80120849609,
        "x": 203.81164550781
      },
      "part": "rightKnee",
      "score": 0.96947449445724
    },
  ]
}
```


Source: Teachable Machine

Single person vs Multi person

Multiple Poses Estimation

Single Pose Estimation



Source: Teachable Machine

DEMO!

TensorFlow

Links

Teachable Machine: https://teachablemachine.withgoogle.com/

Google Experiments: https://experiments.withgoogle.com/

Github TF Examples: https://github.com/tensorflow/examples

Google Colab: https://colab.research.google.com/

Codelabs: https://codelabs.developers.google.com/

Obrigado!

TensorFlow Everywhere