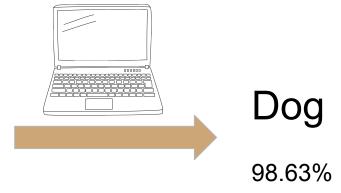
# Image Recognition & Visual Arts

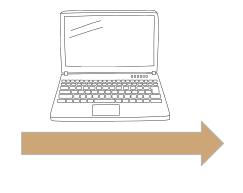
Ada Zhao & Michelle Gallero





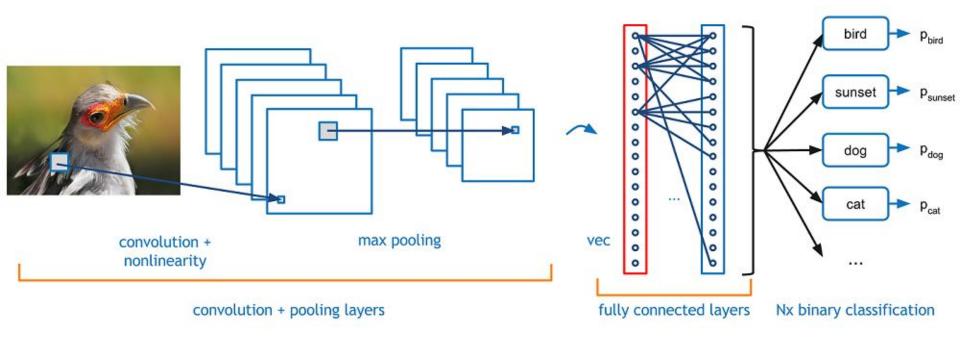






Dog 83.27%

## Convolutional Neural Network(CNN)



**Link** 

## Deep Dream







## Applications in Visual Arts

## Google Arts & Culture Experiments

A place for creative coders, engineers and artists to collaborate and apply Machine Learning (and Google's search algorithms) to Art & Culture experiments at The Lab in Paris.

- OVER 1000 MUSEUMS & COLLECTIONS
- 7 MILLION ARTIFACTS IN DATABASE
- ACCESSIBLE TO EVERYONE

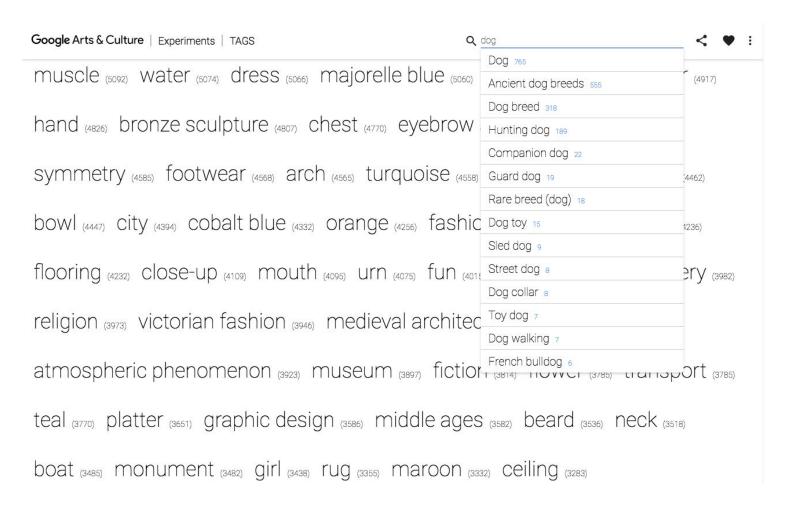


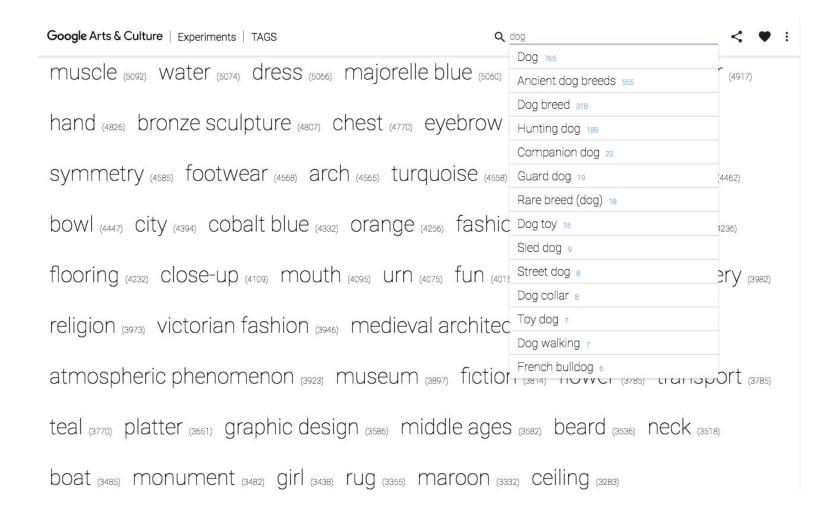
Google Art & Culture Experiments

#### TAG

Could computers help identify artworks?

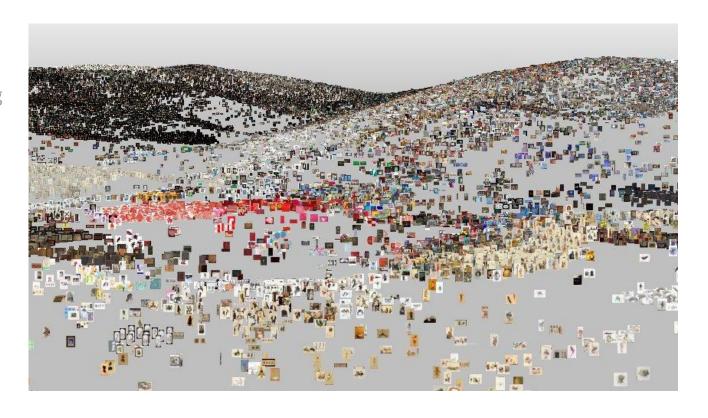
Tag' uses neural networks that automatically applies text labels to image pixels for picture recognition. Search for things that are in the picture.





## T-SNE MAP

Artworks mapped using Machine Learning





T-SNE MAP

### Portrait Matcher

by Jonathan Blanchet, Cyril Diagne, Béatrice Lartigue - Lab212



http://lab212.org/Portrait-Matcher



#### Artist in Residence: Mario Klingemann





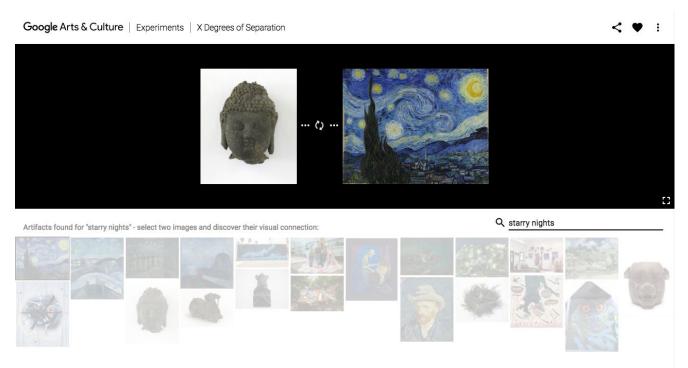
<u>https://www.flickr.com/photos/quasimondo/</u>
<u>https://www.youtube.com/watch?v=1v1rsAM3Kul&feature=youtu.be</u>

#### X DEGREE OF SEPARATION

by <u>Mario Klingemann</u> with <u>Simon Doury</u>

The hidden paths through culture using:

MACHINE LEARNING SERENDIPITY IMAGE SIMILARITY







Artifacts found for "starry nights" - select two images and discover their visual connection:



#### IMAGE TO IMAGE TRANSLATION

Image to Image Translation using 2 neural networks (ex: generative adversarial networks), where you give it an input for a style and the output would apply that style to another image.

- Pix2pix
- CycleGAN
- Deep Photo Style Transfer
- Neural Face

