

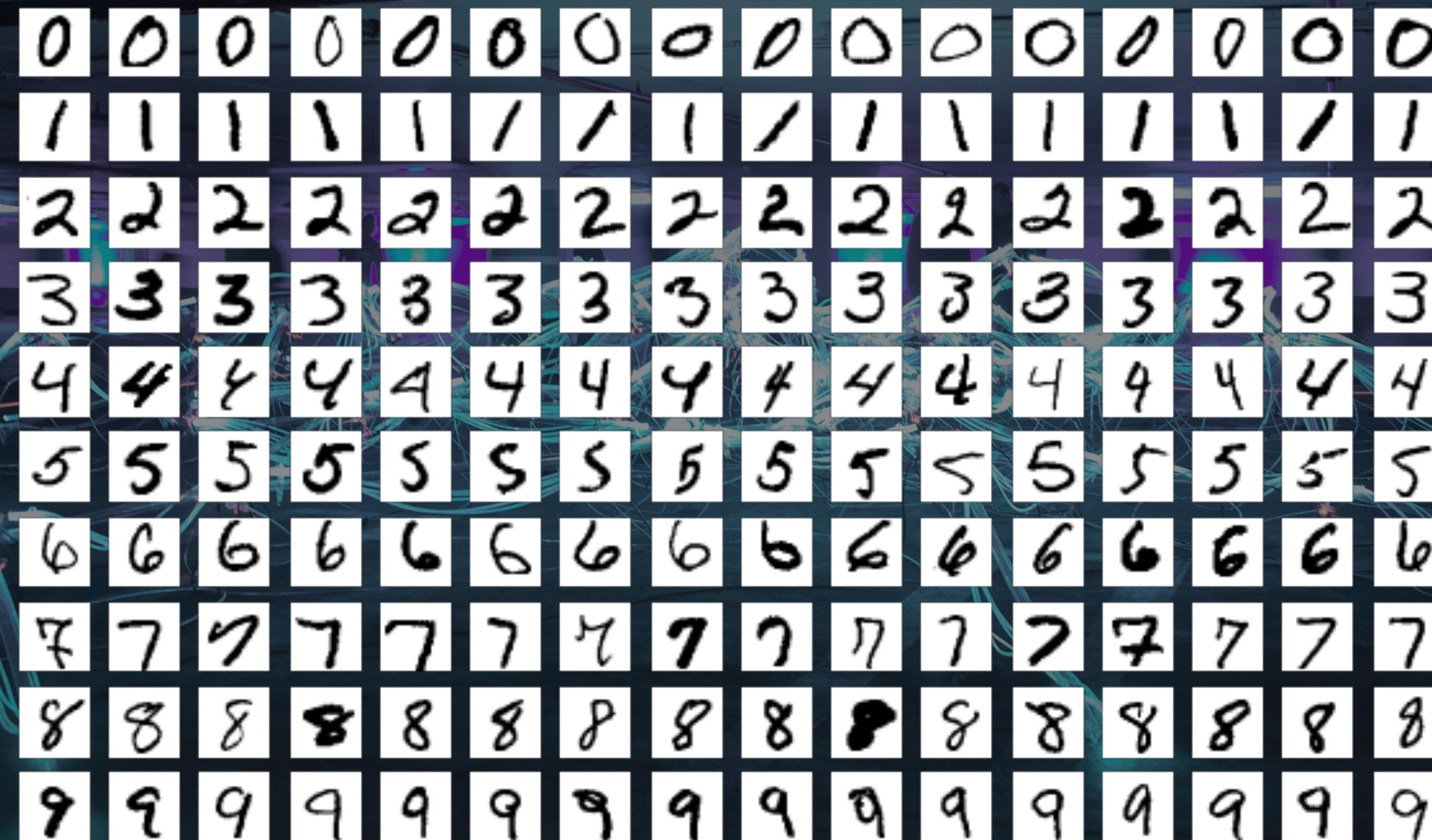


**DATA FOR
COMPUTER VISION**

chatShopper

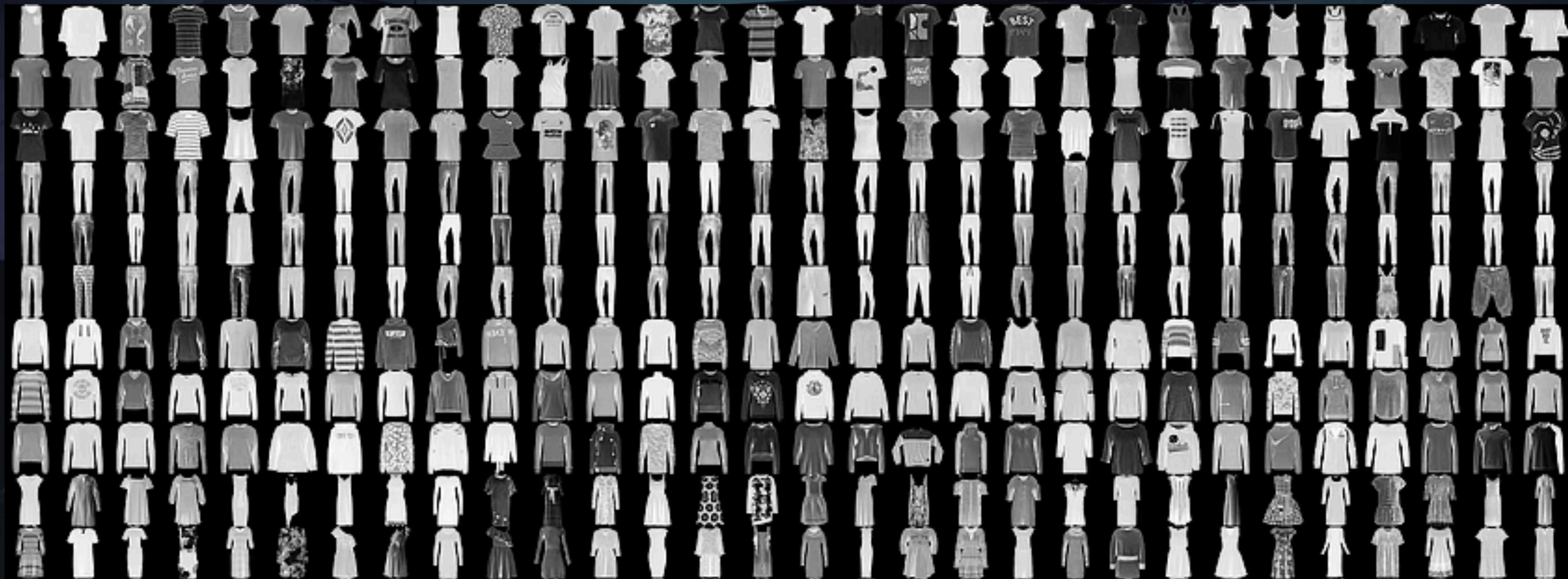


MNIST DATASET



60,000 TRAINING IMAGES / 10,000 TESTING IMAGES

FASHION-MNIST



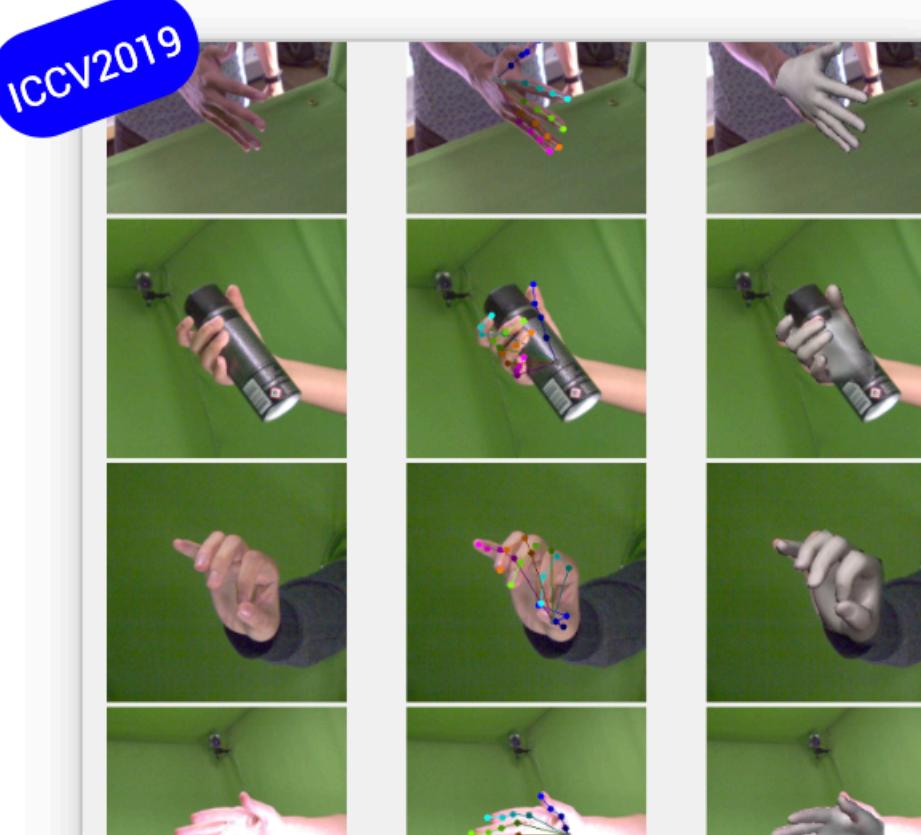
60,000 TRAINING IMAGES /10,000 TESTING IMAGES

VISUALDATA.IO

VisualData - Search Engine for Computer Vision Datasets

visualdata.io

ICC2019



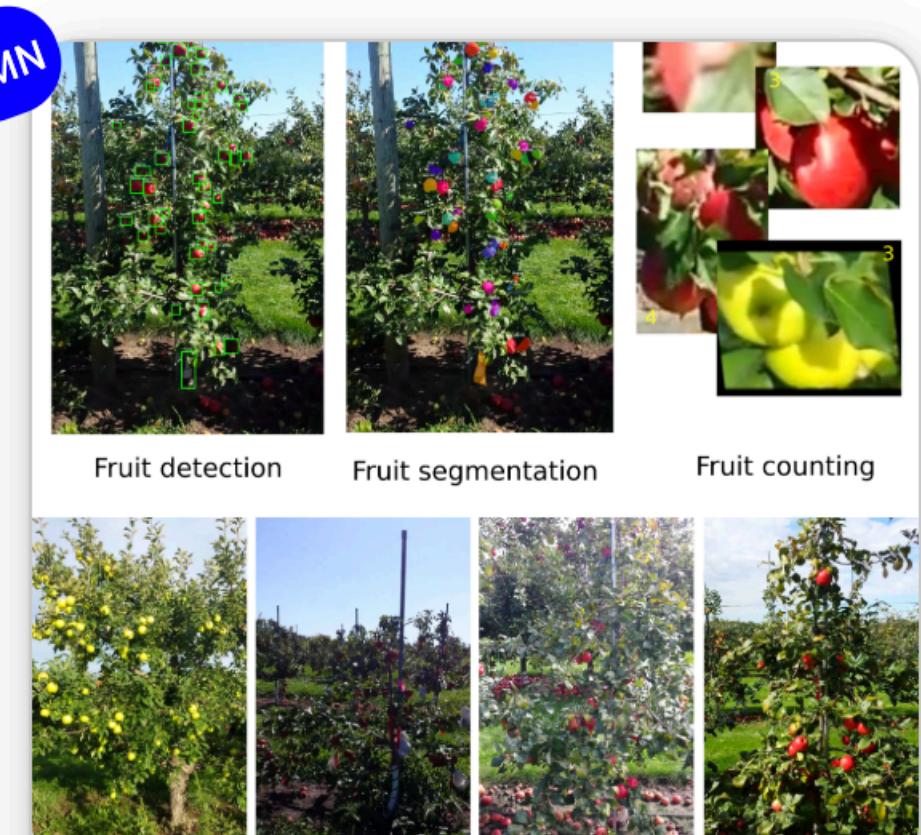
FreiHAND Dataset
2019.9
Dataset for Markerless Capture of Hand Pose and Shape from Single RGB Images

3D Reconstruction 3D

code papers

Popularity

UMN



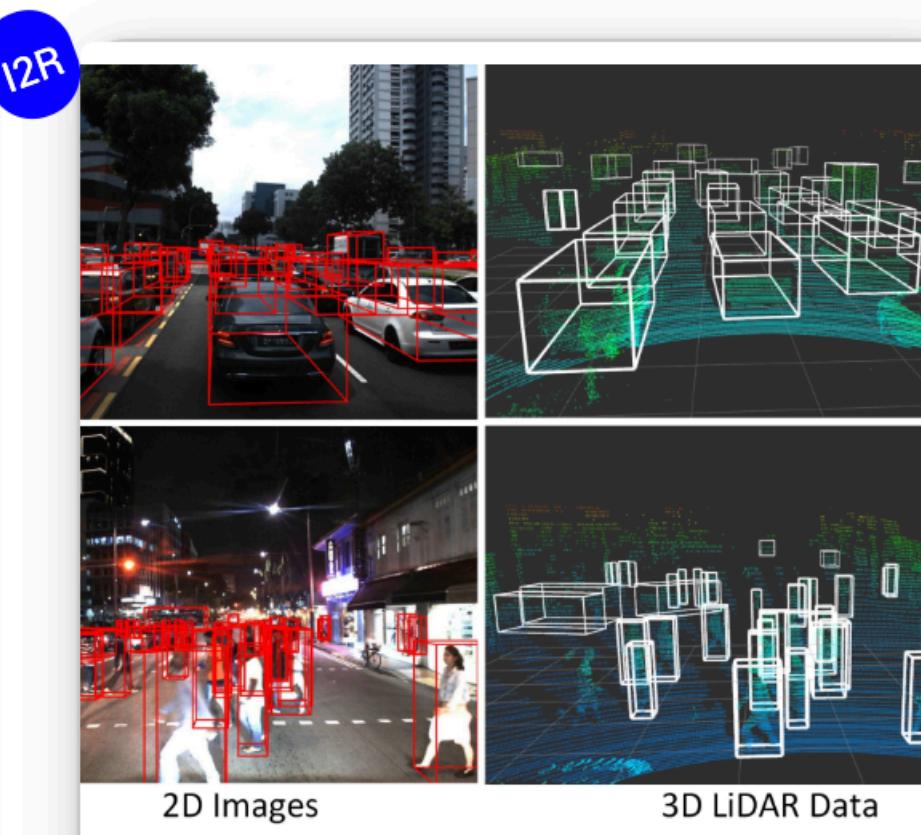
MinneApple
2019.9
A Benchmark Dataset for Apple Detection and Segmentation

Object Detection (Image)
Image Segmentation

code papers

Popularity

I2R



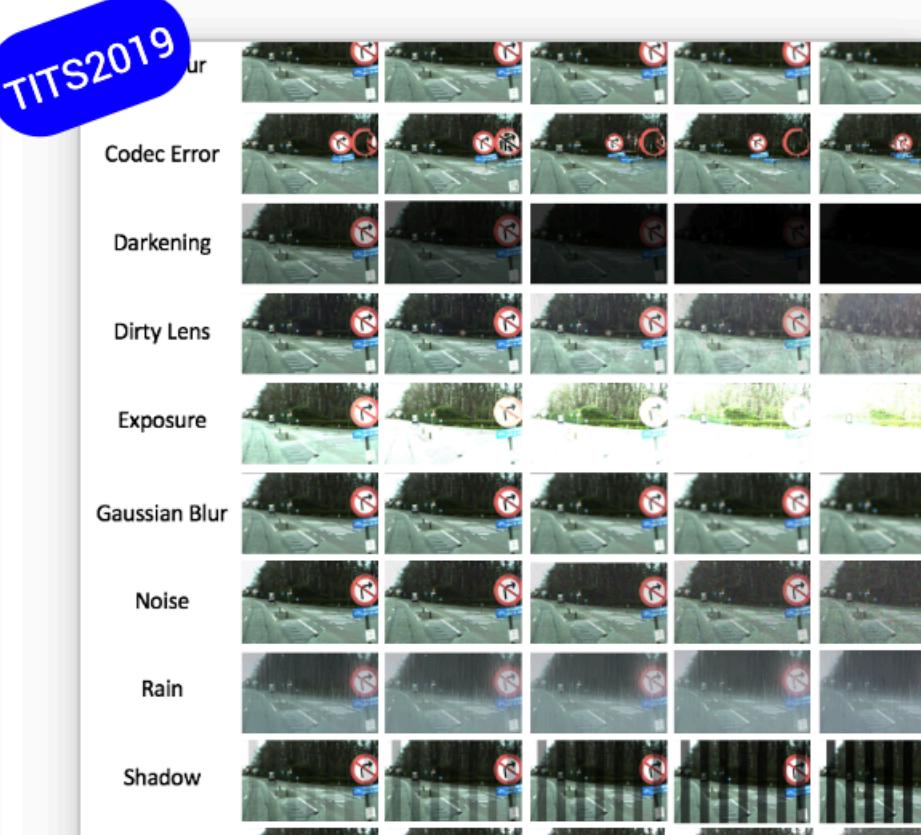
A*3D
2019.9
An Autonomous Driving Dataset in Challenging Environments

Autonomous Driving
Object Detection (Image)

papers

Popularity

TITS2019



CURE-TSD
2019.7
Challenging Unreal and Real Environments for Traffic Sign Detection

Object Detection (Video)

papers

Popularity

Code Error
Darkening
Dirty Lens
Exposure
Gaussian Blur
Noise
Rain
Shadow

IMAGENET | 14,197,122 IMAGES

ImageNet Tree View Not Secure | image-net.org/explore

IMAGENET 14,197,122 images, 21841 synsets indexed

SEARCH Home About Explore Download Not logged in. Login | Signup

Sandbar, sand bar

A bar of sand

- gametophyte (2)
- houseplant (12)
- garden plant (1)
- vascular plant, tracheophyte (4)
- poisonous plant (31)
- air plant, epiphyte, aerophyte, e
- rock plant (2)
- autophyte, autophytic plant, au
- myrmecophyte (0)
- geological formation, formation (17)
- natural object (1112)
 - rock, stone (30)
 - asterism (0)
 - carpet (0)
 - black body, blackbody, full radia
 - radiator (1)
 - consolidation (0)
 - mechanism (12)
 - barrier (4)
 - bar (1)

Treemap Visualization Images of the Synset Downloads

1186 pictures 73.24% Popularity Percentile Wordnet IDs

IMAGENET CHALLENGE

The screenshot shows a web browser window with the following details:

- Title Bar:** ILSVRC2017
- Address Bar:** Not Secure | image-net.org/challenges/LSVRC/2017/
- Toolbar:** Back, Forward, Stop, Refresh, Home, and other standard browser icons.
- Page Content:**
 - Section Header:** IMAGENET Large Scale Visual Recognition Challenge 2017 (ILSVRC2017)
 - Navigation Links:** Introduction, News, History, Timetable, Challenges, FAQ, Citation, Contact
 - Section Header:** Introduction
 - Text:** This challenge evaluates algorithms for object localization/detection from images/videos at scale. Most successful and innovative teams will be invited to present at [CVPR 2017 workshop](#).
 - List:**
 - [Object localization](#) for 1000 categories.
 - [Object detection](#) for 200 fully labeled categories.
 - [Object detection from video](#) for 30 fully labeled categories.
 - Section Header:** News
 - List:**
 - Jul 26, 2017: We are passing the baton to [Kaggle](#). From now on, all three challenges(LOC-CLS, DET, VID) will be hosted on Kaggle!
 - Jul 17, 2017: [Results announced](#).
 - Jun 25, 2017: [Submission server](#) for VID is open, new additional train/val/test images for VID is available now, deadline for VID is extended to July 7, 2017 5pm PDT.
 - Jun 18, 2017: [Submission server](#) for CLS-LOC and DET is open.
 - Jun 15, 2017: Taster challenges with [amazon bin image dataset](#) will not be held. There were some issues on final dataset release. We sincerely apologize to the teams that have been working on this challenge.
 - Jun 12, 2017: New additional test set(5,500 images) for object detection is available now.
 - Mar 31, 2017: Register your team and download data at [here](#).

IMAGENET CHALLENGE NETWORKS

VGG (2014)

RESNET (2015)

GOOGLE LANDMARK CHALLENGE

Google Landmark Recognition 2019 x +

kaggle.com/c/landmark-recognition-2019 | 3 4

≡ kaggle

Research Prediction Competition

Google Landmark Recognition 2019

Label famous (and not-so-famous) landmarks in images

\$25,000 Prize Money

Google · 176 teams · 4 months ago

Overview Data Notebooks Discussion Leaderboard Rules Join Competition

Overview

Description

Evaluation

Timeline

Did you ever go through your vacation photos and ask yourself: What is the name of this temple I visited in China? Who created this monument I saw in France? Landmark recognition can help! This technology can predict landmark labels directly from image pixels, to help people better understand and organize their photo collections.



**WHAT ABOUT MY
CHALLENGES?**



OUR APPROACH

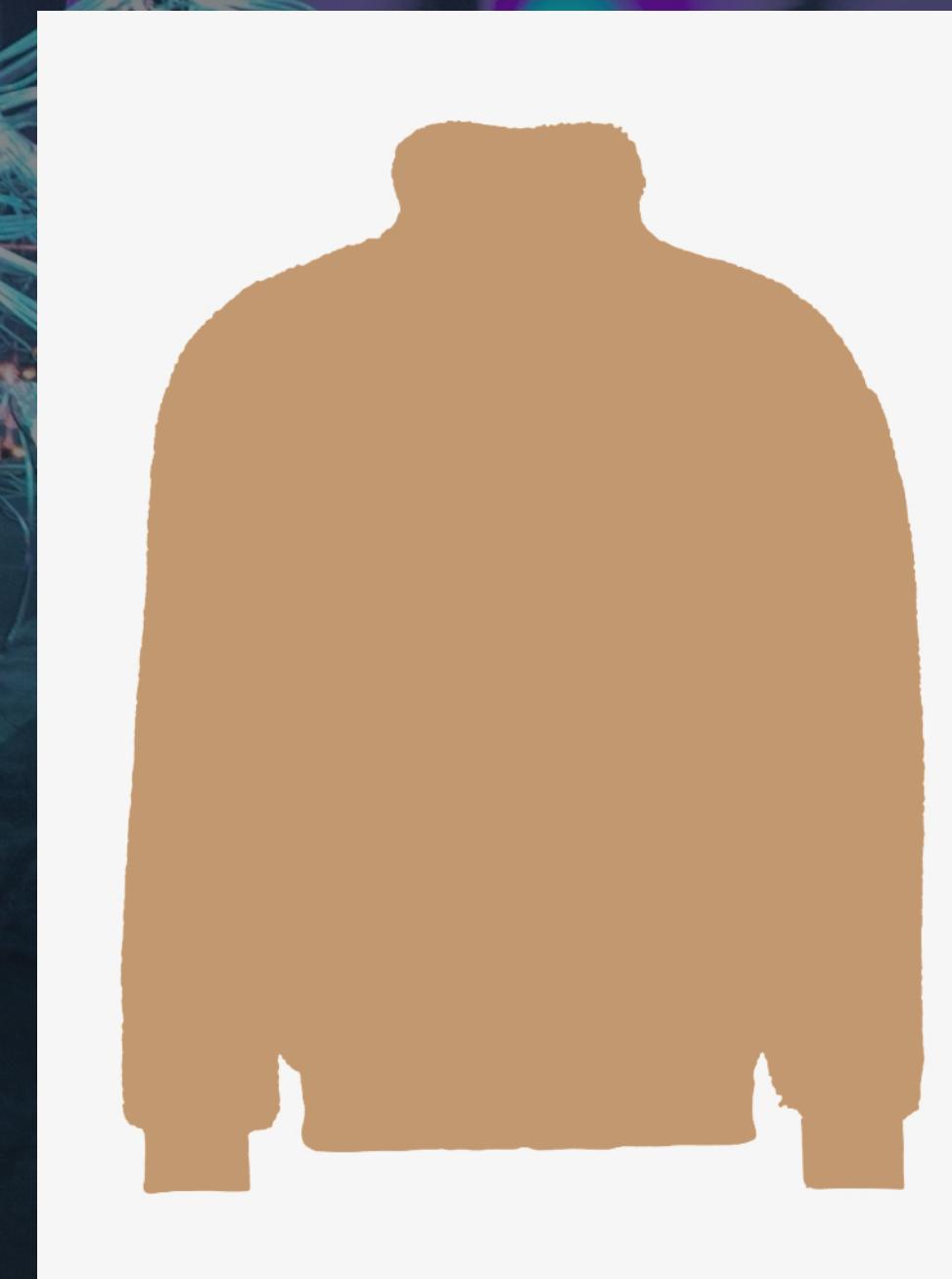
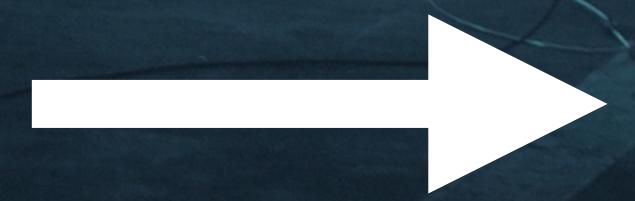
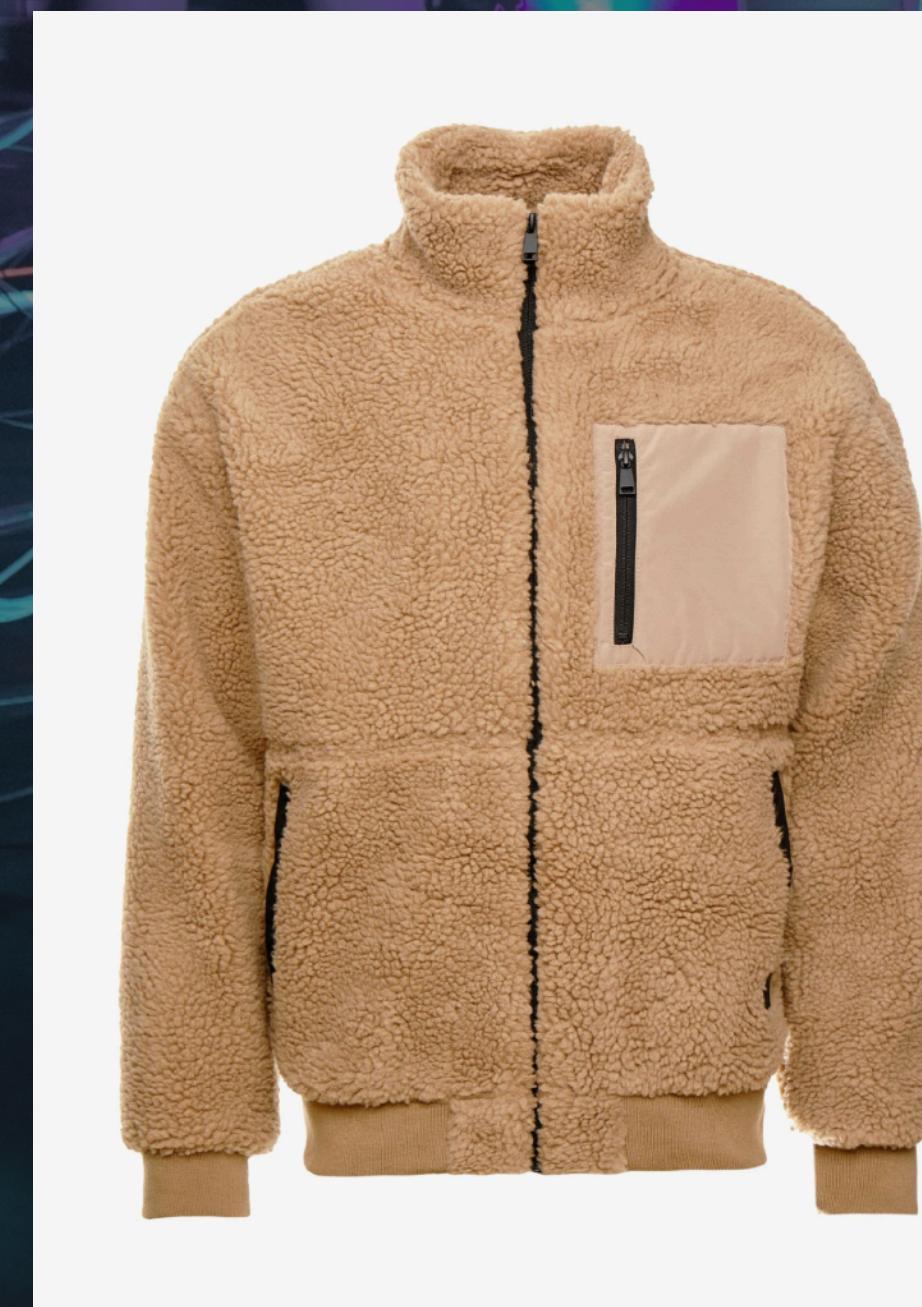


chatShopper

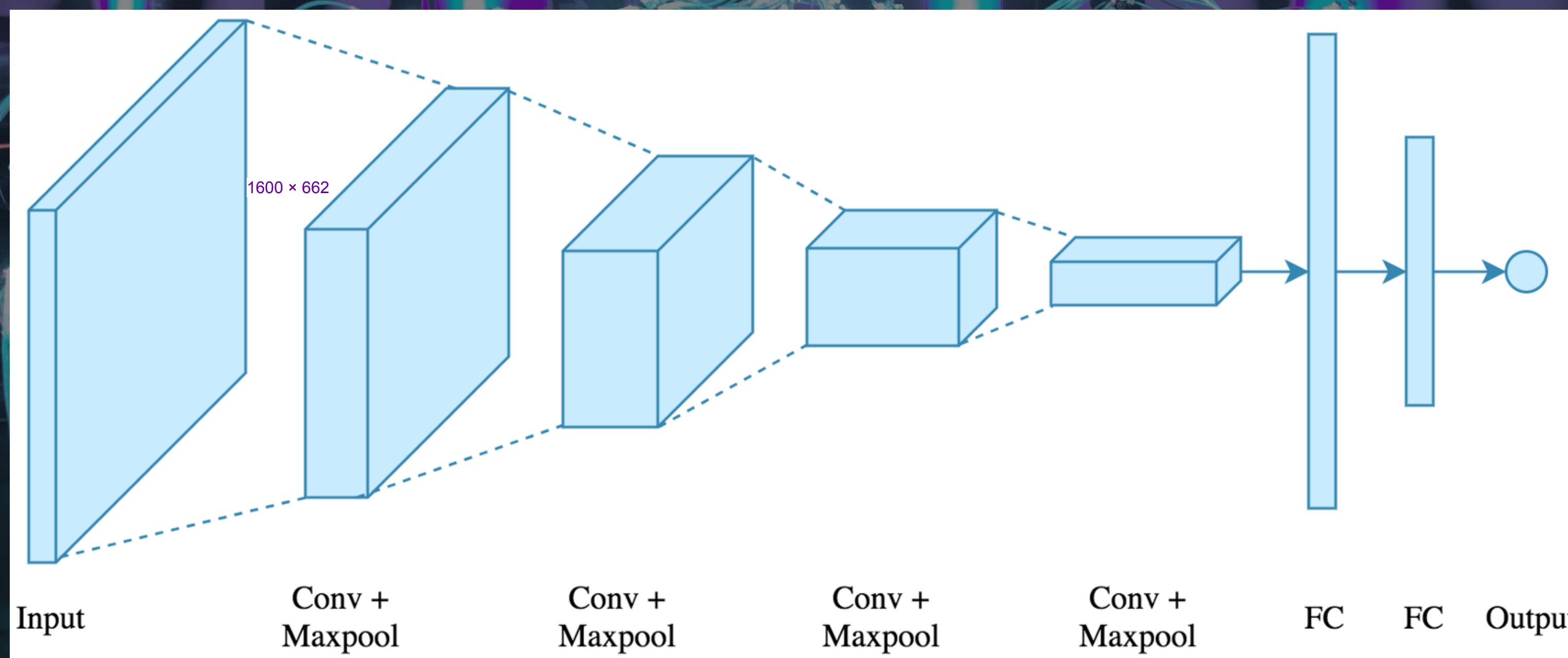
chatShopper



CLASSICAL IMAGE PROCESSING



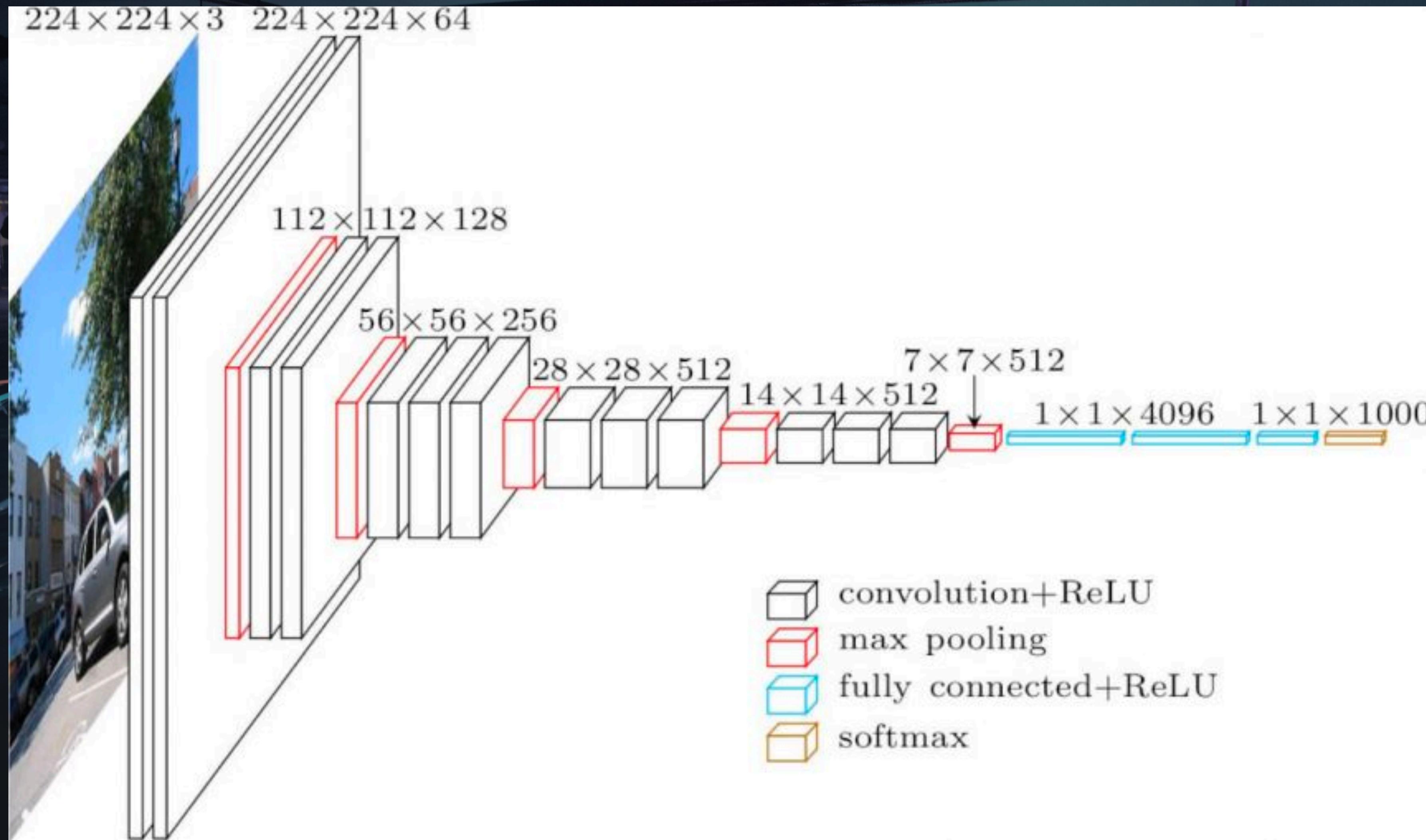
SELF-PROGRAMMED NEURAL NET



TRANSFER LEARNING

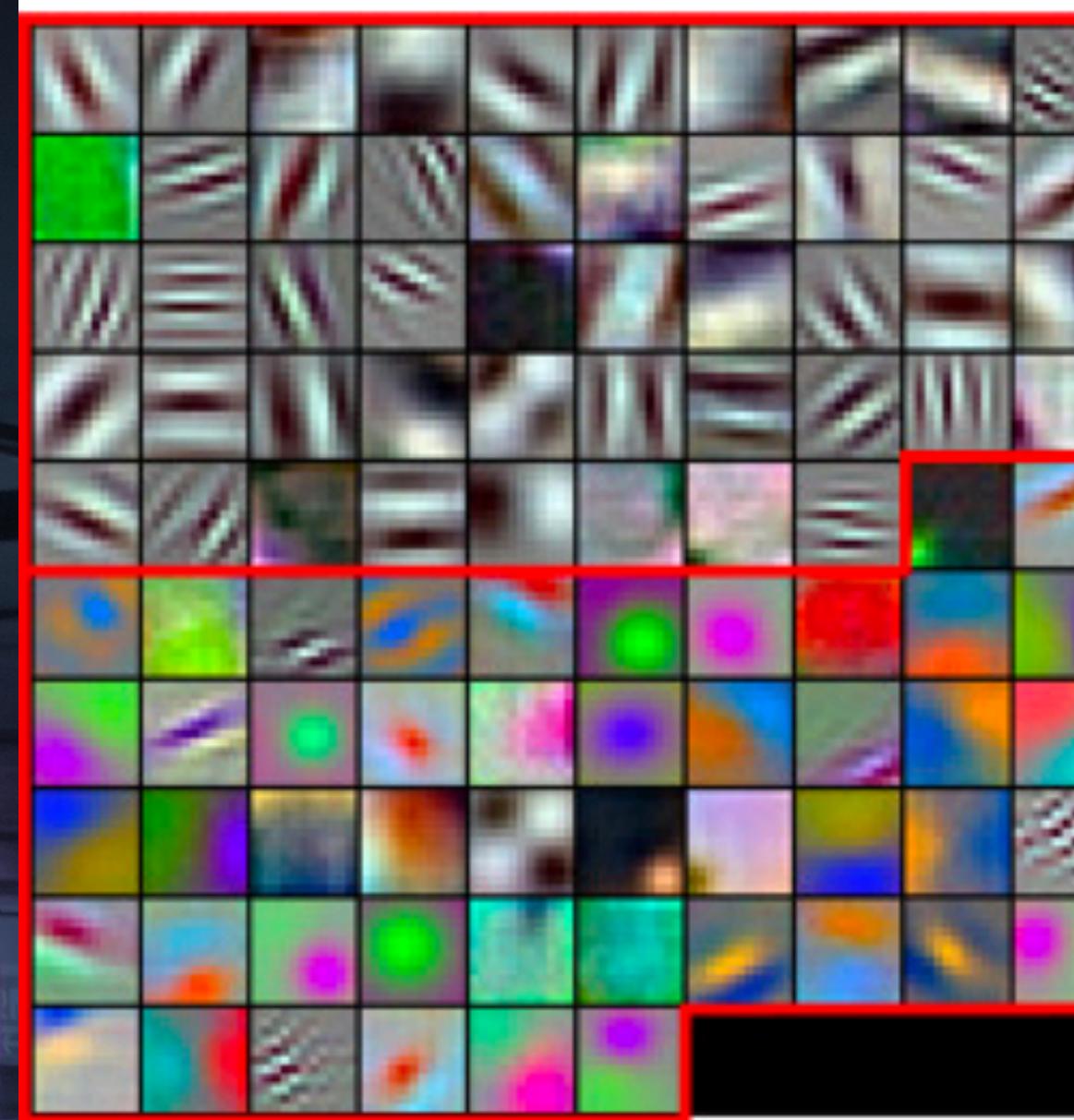


TRANSFER LEARNING

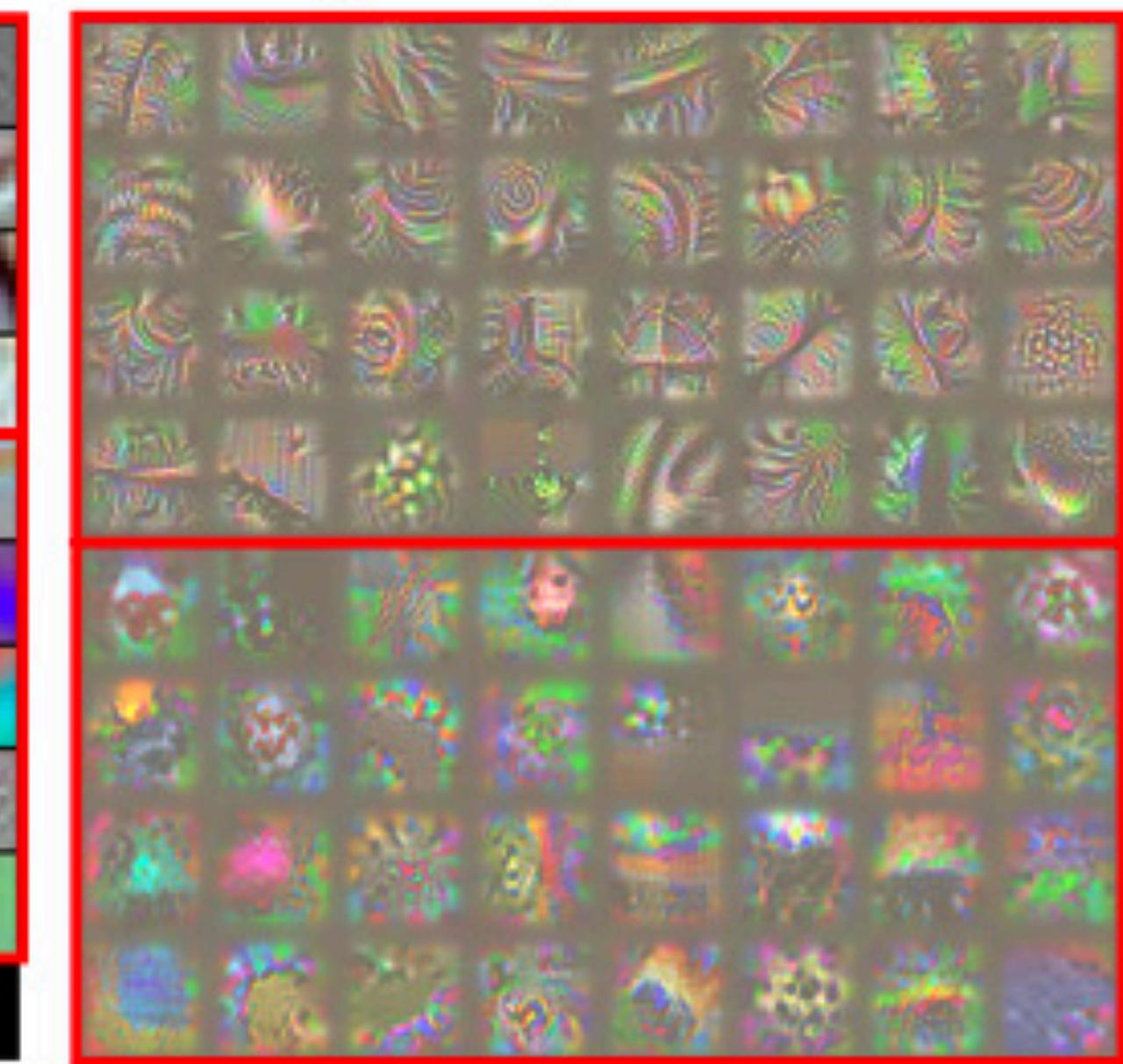




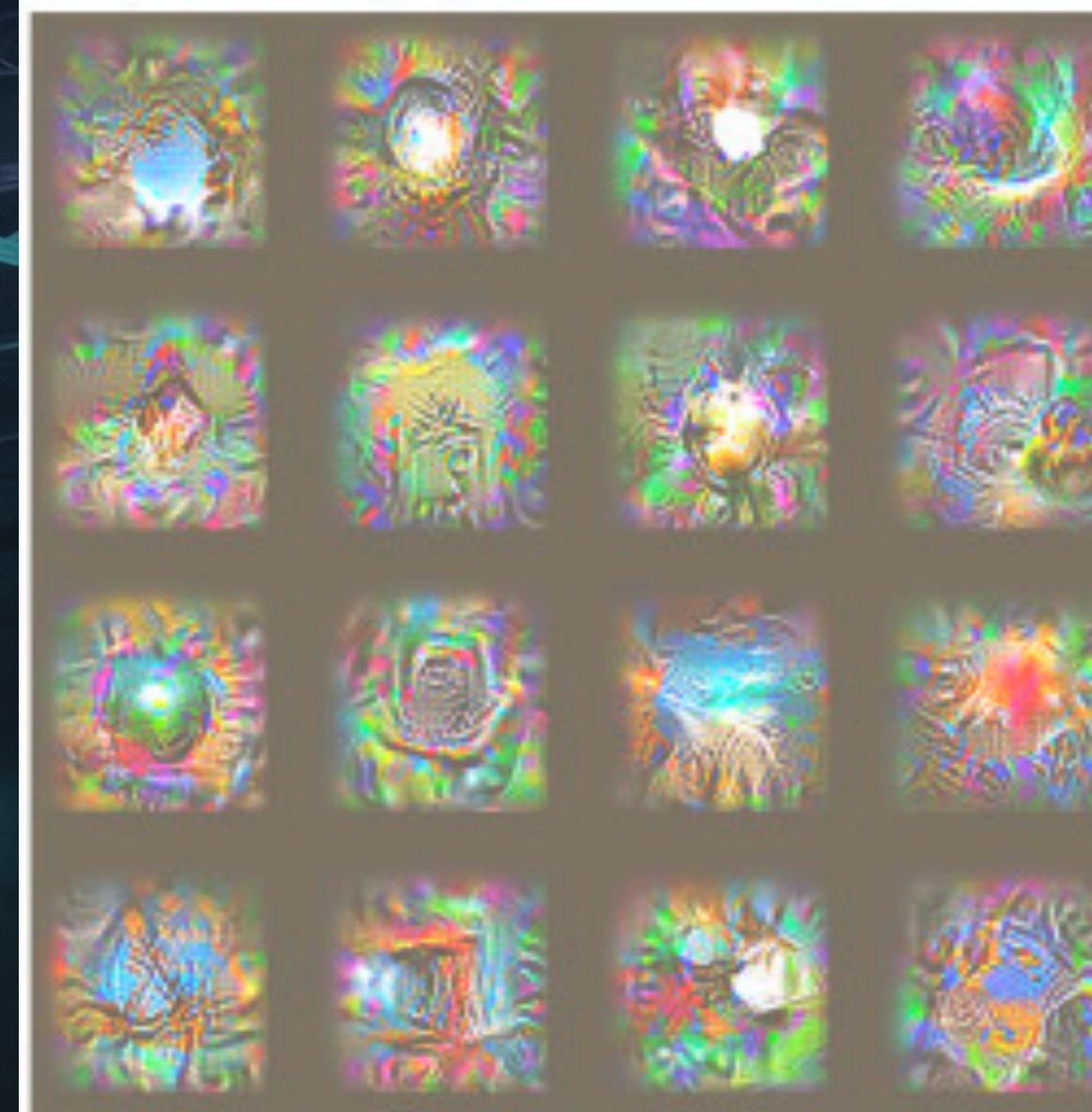
Conv1:



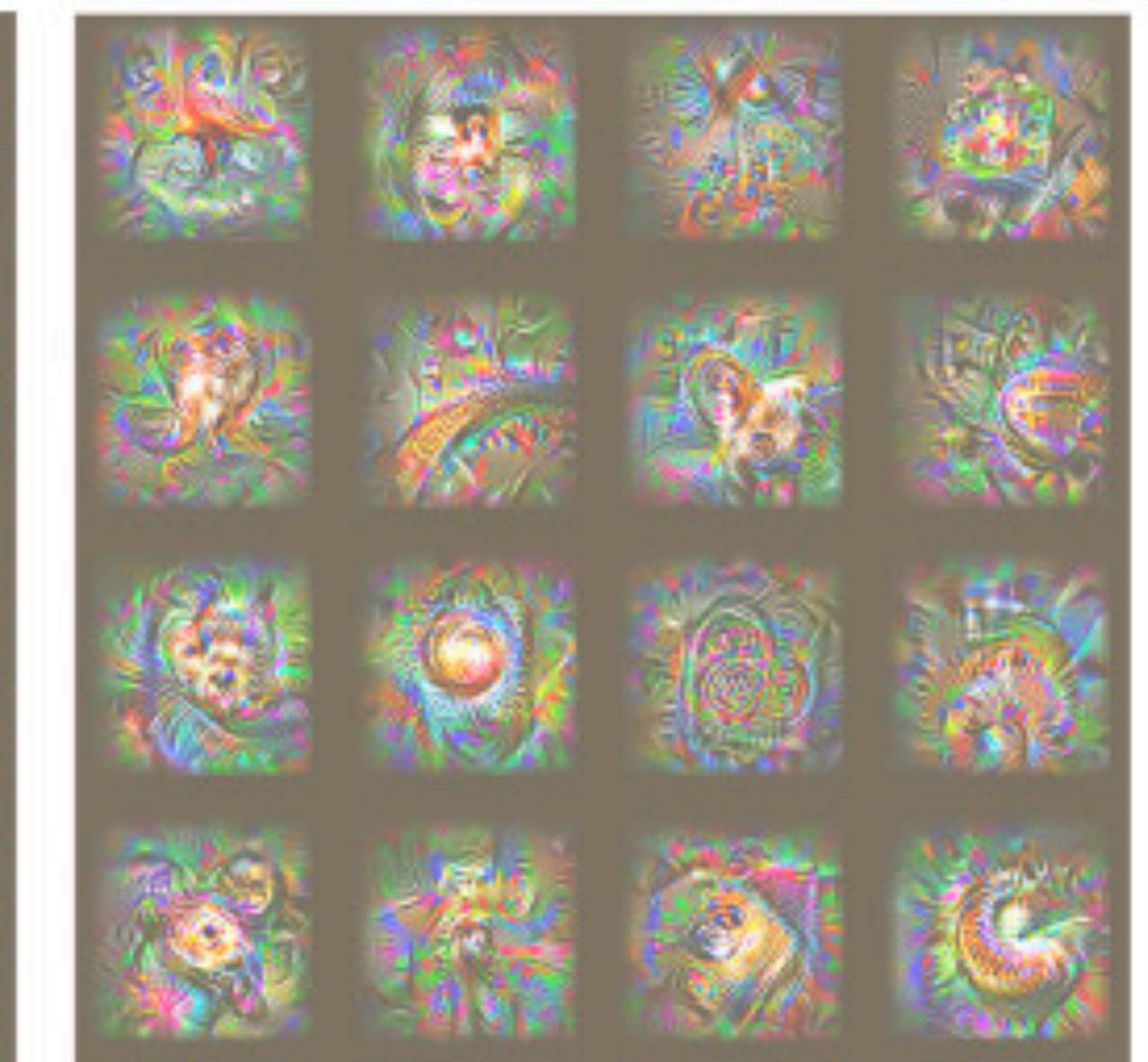
Conv2 (partial):



Conv3 (partial):



Conv4 (partial):



A dark, atmospheric photograph of a multi-level parking garage. The scene is dimly lit by overhead fluorescent lights and punctuated by bright, glowing blue and purple lines that resemble fiber optic cables or neon lights. These lines create a sense of depth and motion, winding through the space. In the background, several people are visible as dark silhouettes, some standing near a white pillar. The ceiling features a complex network of pipes and structural beams.

QUESTIONS?