

Clowder Tensorflow Integration

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ILLINOIS

NCSA | National Center for
Supercomputing Applications

City of Dallas Street View Dataset



Pothole



Fire Hydrant

Goals:

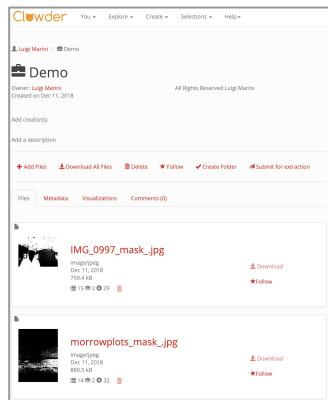
- Support management of dataset
 - images and labels
- Support creation and execution of models using Deep Learning
- Manual and automatic labeling of images



Clowder <-> Tensorflow

- Simplify training models from data and metadata in Clowder
- Run created models as extractors to label new data

Load Data



All images in
dataset

-Download from API
-Or read from shared
filesystem



Metadata
from each
file

[tf.data.Dataset](#)

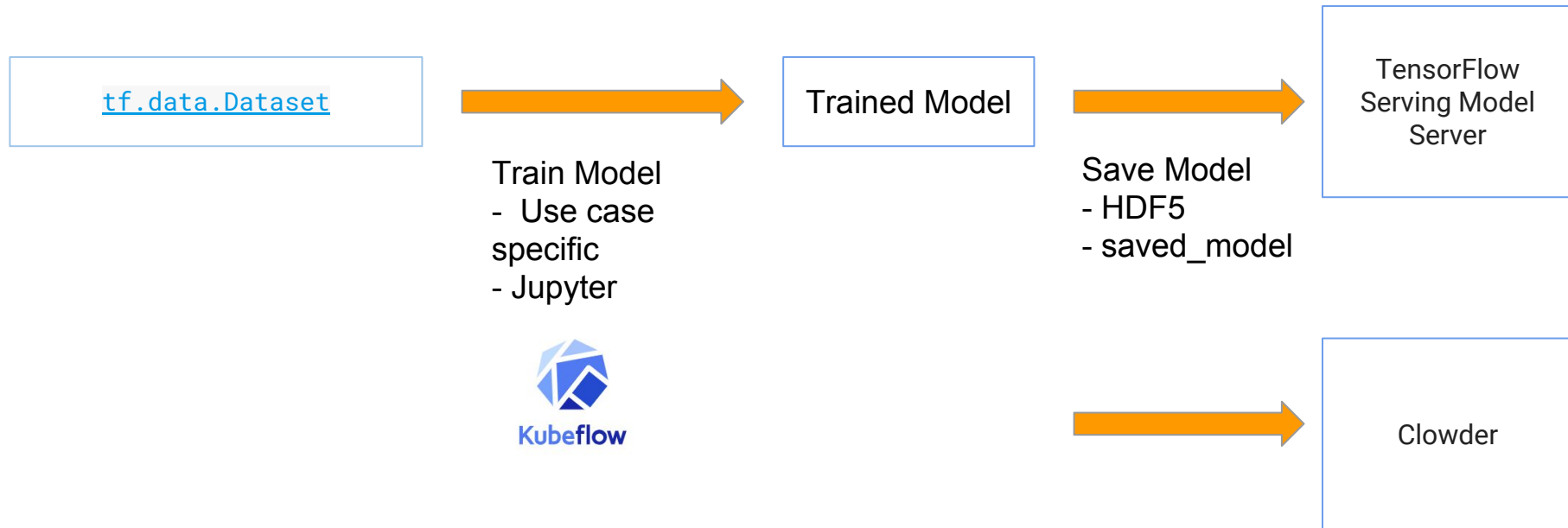
- Load images as numpy arrays
- Make them smaller
- Use metadata to create labels

Extracted by <https://clowder.ncsa.illinois.edu/clowder/extractors/ncsa.cv.caltech101/1.0> on Dec 11, 2018

basic_caltech101_score: -0.824910

basic_caltech101_category: BACKGROUND_Google

Train Model



Execute Model As Extractor

