RECAP

Topic Already Covered:

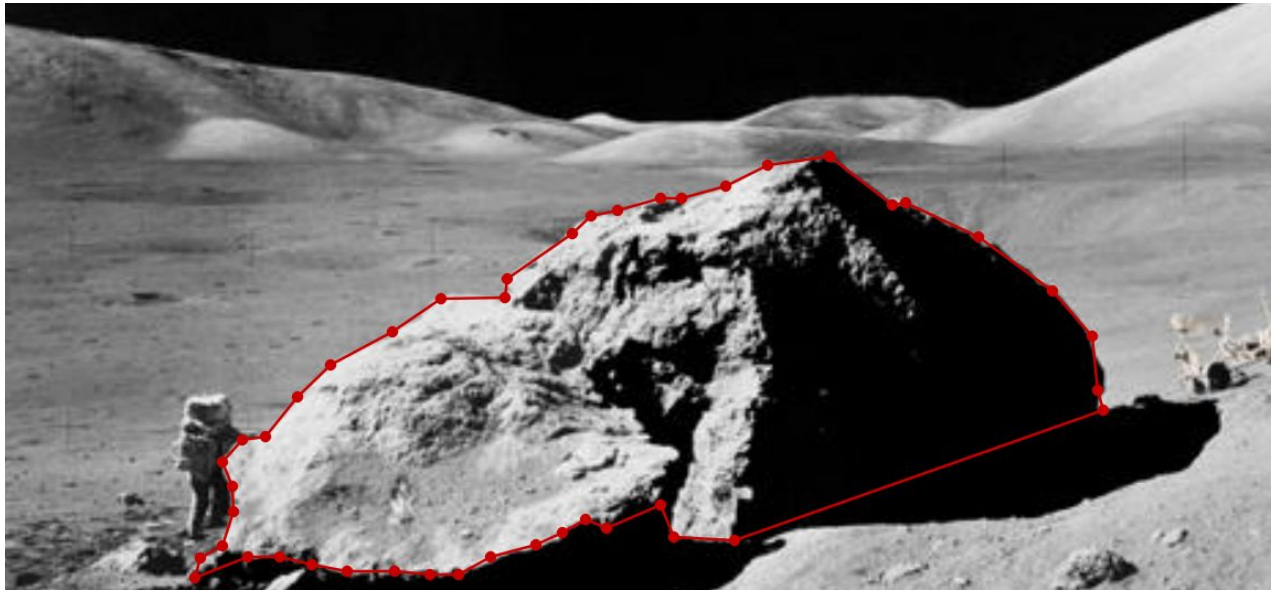
- Computer Vision Introduction
- Convolution Operation
- Edge Detection
- Pooling operations, Padding
- State of the Art CNNs
- Data Augmentations
- Image Classification using tensorflow

This session -

- Data Exploration
- Labelme Installation
- Data Annotation
- Annotation to mask Conversion
- IOU and related metrics

DATA ANNOTATION

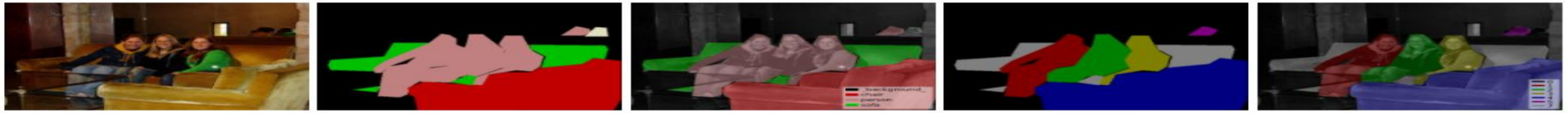
Sample Annotation



LABELME

Description

Labelme is a graphical image annotation tool inspired by http://labelme.csail.mit.edu.
It is written in Python and uses Qt for its graphical interface.



VOC dataset example of instance segmentation.

Other examples (semantic segmentation, bbox detection, and classification).

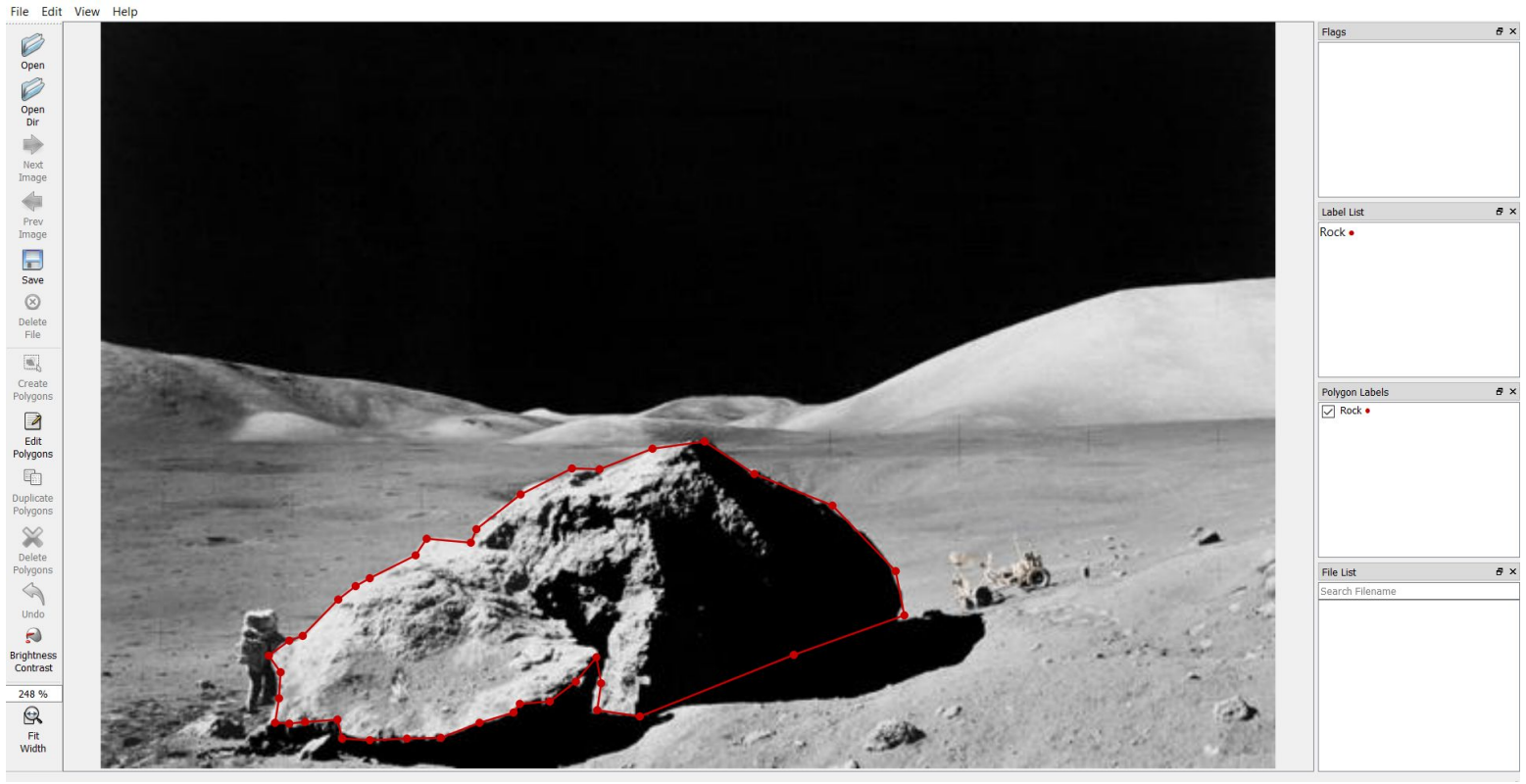
Various primitives (polygon, rectangle, circle, line, and point).

https://github.com/wkentaro/labelme

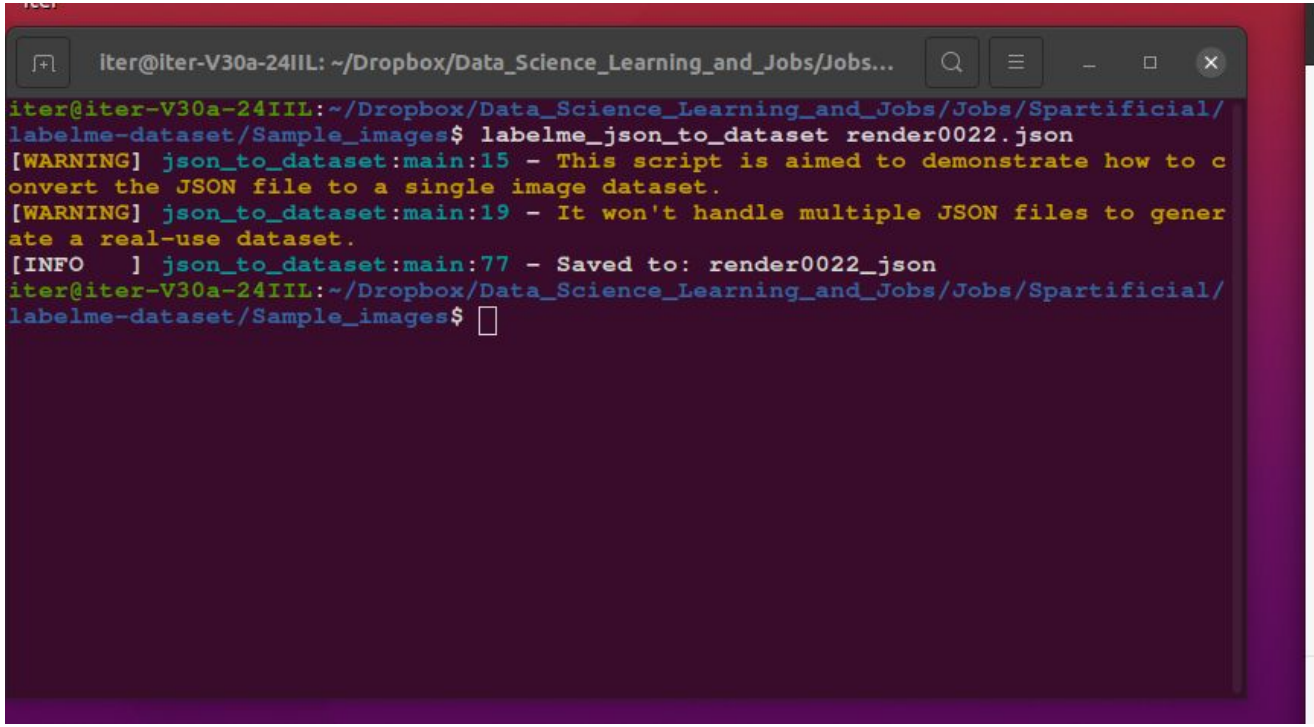
INSTALLATION

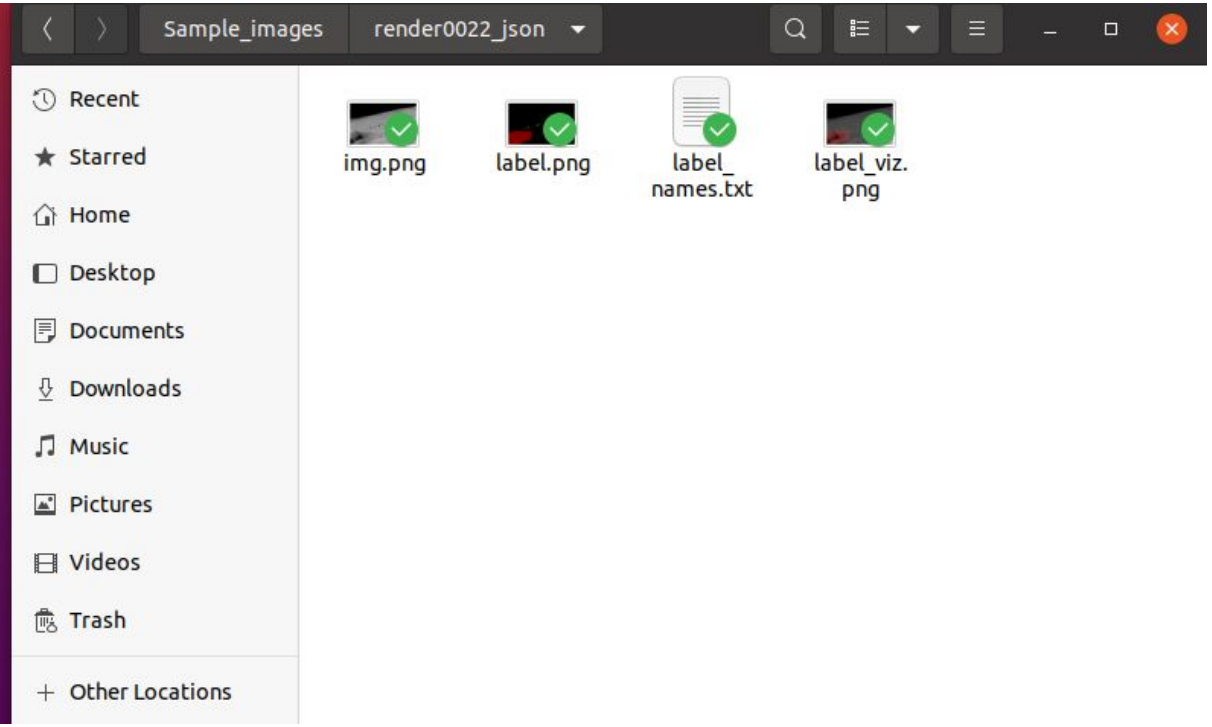
```
# python2
conda create --name=labelme python=2.7
source activate labelme
# conda install -c conda-forge pyside2
conda install pyqt
pip install labelme
# if you'd like to use the latest version. run below:
# pip install git+https://github.com/wkentaro/labelme.git

# python3
conda create --name=labelme python=3.6
source activate labelme
# conda install -c conda-forge pyside2
# conda install pyqt
# pip install pyqt5  # pyqt5 can be installed via pip on python3
pip install labelme
# or you can install everything by conda command
# conda install labelme -c conda-forge
```

DEMONSTRATION

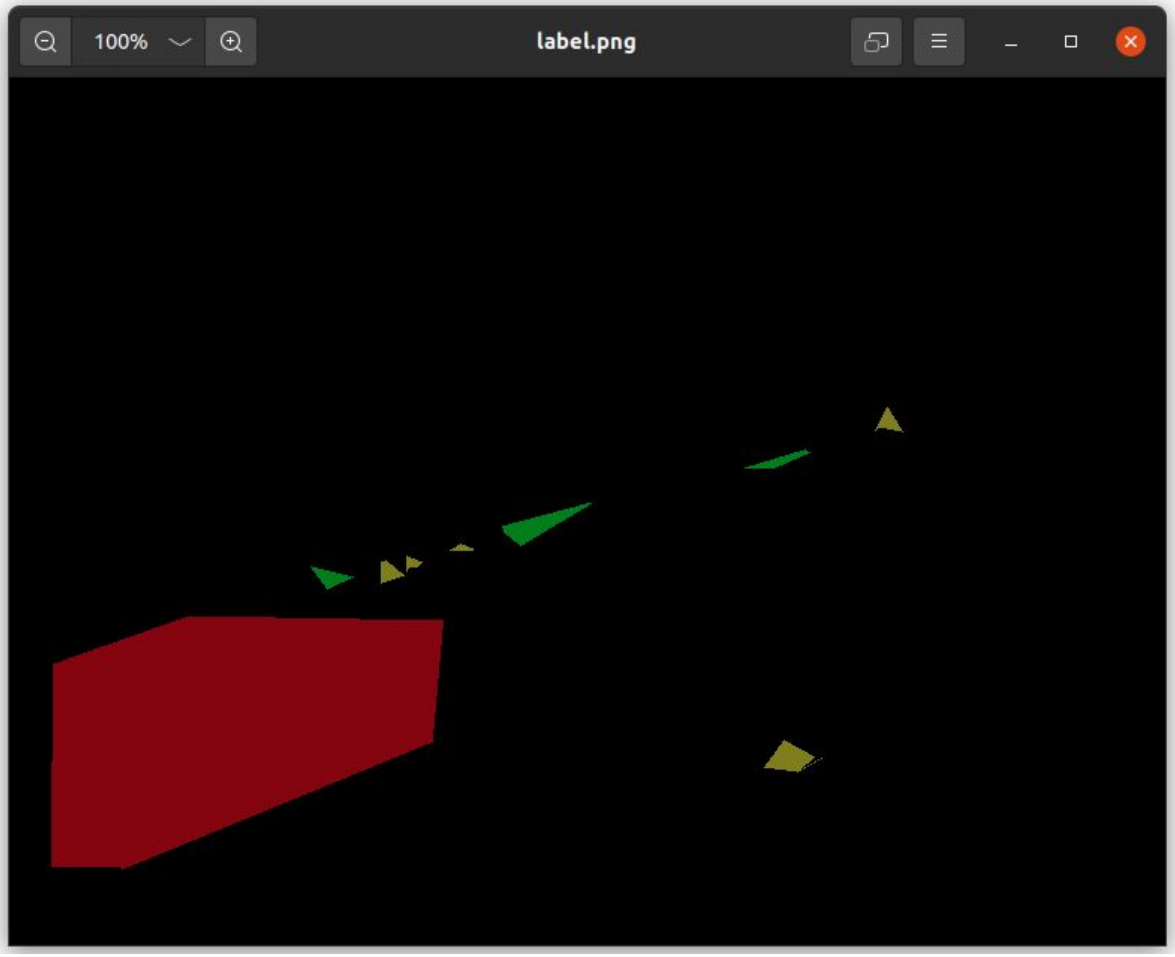


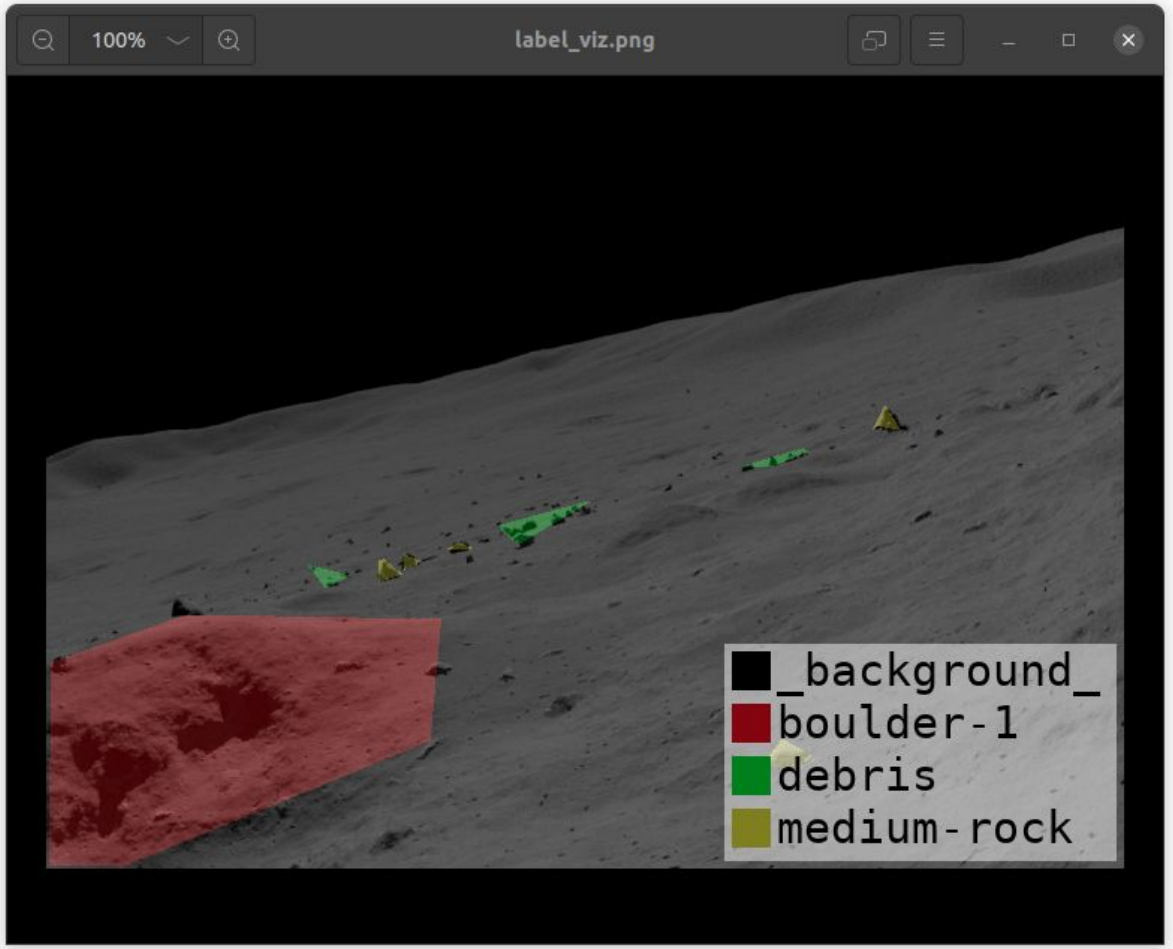
ANNOTATION TO MASK CONVERSION





ANNOTATION TO MASK CONVERSION





OUTPUT

Input Image

Output Image