

Deep learning Masterclass

Kaggle Challenge

Image Classification for Roof Orientation



Open Solar Map

- To support sustainable energy generation
- Roof tops are excellent spots to place solar panels
- All roofs are not equal!
- [OpenSolarMap](#) adds Roof orientation/type to Openstreetmaps
- Let's build a Classifier!

Image classification

Category 1: North-South
Orientation



Category 2: East-west
Orientation



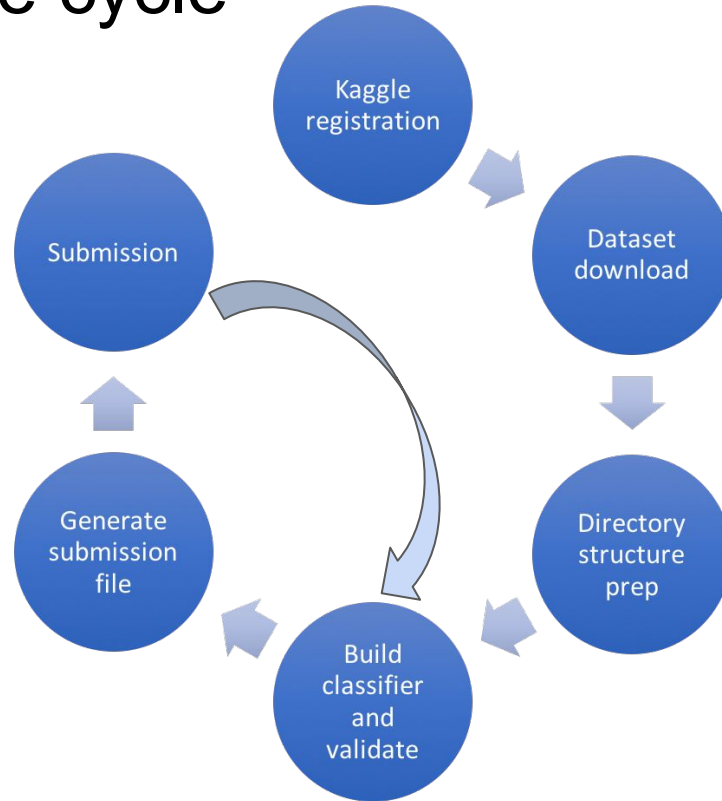
Category 3: Flat Roof



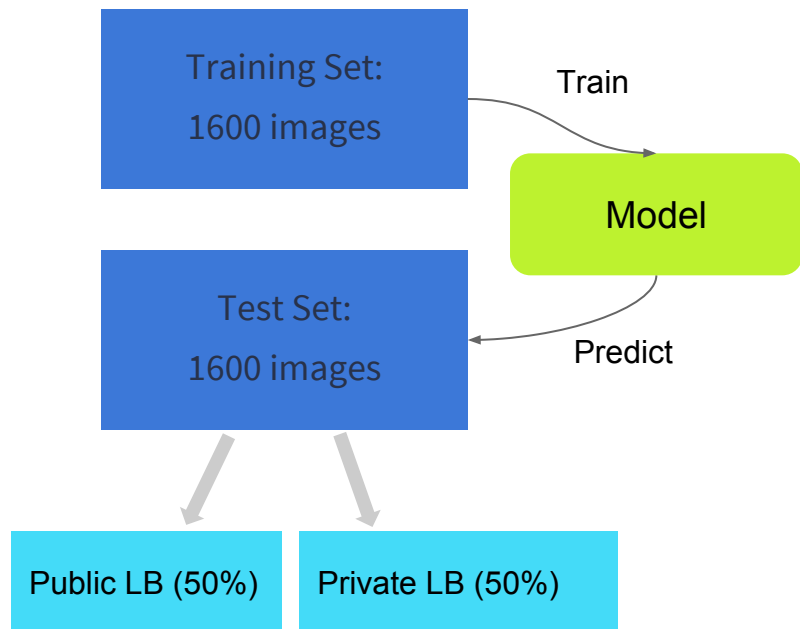
Category 4: Other Roof



Competition Life cycle



Dataset and Evaluation



Evaluation metric:
Classification accuracy

Kaggle-In-Class Challenge

Url: <https://kaggle.com/join/deeplearningmaster1>

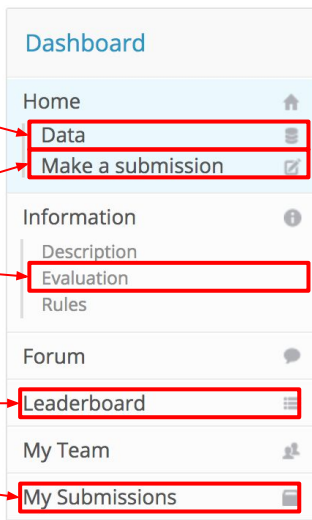


Knowledge • 1 team

Deep Learning Masterclass 1

Fri 10 Mar 2017

Sat 1 Apr 2017 (15 days to go)



Download data

Submit predictions

Evaluation

View leaderboard

View submissions

Competition Details » [Get the Data](#) » [Make a submission](#)



This competition is private-entry. You've been invited to participate.

Classify the orientation of roofs based on satellite images

The challenge of this workshop is to develop a model to classify the orientation of the roofs into 4 different categories.

Examples:

Questions

Please download the hands-on data if you have not done so by cloning the repo to your local

1. git clone https://github.com/aaxwaz/NUS_ISS_DeepLearningWorkshop.git
2. Follow the instructions(from github) and install Docker and set-up your containers

Anyone having troubles downloading the data please ask us :)

Missing files in docker(Windows) ?

Docker copy to transfer from local drive to docker container

API : <https://docs.docker.com/engine/reference/commandline/cp/>

Eg : `docker cp C:/path_to_file keras-tf-jupyter:/src/NUS_ISS_DeepLearningWorkshop-master`