

AIAP Miniproject 2

Content

- Imports

Imports

```
In [ ]: from keras import utils as keras_utils
```

Dataset

```
In [ ]:
```

b) Citation and description

- **Title:** Architectural Heritage Elements Dataset
- **Subtitle:** 128 (creative commons)
- **Version:** 1
- **Publication Date:** 2017-02-20
- **Author:** Jose Llamas
- **Organization:** Fundación CARTIF
- **Source:** https://correo.cartif.es/home/joslla@cartif.es/Briefcase/Architectural_Heritage_Elements_image_Dataset/Architectural_Heritage_Elements_Dataset_128%28creative_commons%29.zip

Citation: Llamas, J. (2017). Architectural Heritage Elements Dataset: 128 (creative commons) (Version 1) [Dataset; ..Zip]. Fundación CARTIF. https://correo.cartif.es/home/joslla@cartif.es/Briefcase/Architectural_Heritage_Elements_image_Dataset/Architectural_Heritage_Elements_Dataset_128%28creative_commons%29.zip

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c) Splitting into training and test data

```
In [ ]: keras_utils.image_dataset_from_directory(directory="./data/raw/Architectual_Heritage_Elements_Dataset_128(creative_commons)", image_size=(128, 128),
train_val_imgs, test_images, train_val_lables, test_labels = model_selection.train_test_split()
```

Exploratory data analysis

Exploratory data analysis

Architecture 1 (underfitting)

Architecture 2 (overfitting)

Architecture 2 (optimized)

Quantification of the model performance

Discussion