

Colorful Image Colorization with Tensorflow

Sophia Schulze-Weddige

Malin Spaniol

Maren Born

Integrating Artificial Neural Networks with Tensorflow

Universität Osnabrück

February 14, 2020

1 Introduction/Motivation

- we want to build a network that can colorize images

2 Important background knowledge (including reference to most relevant publications)

- We started looking at this paper:
<https://arxiv.org/abs/1603.08511> ,
- at their best solution

3 The model and the experiment (MAIN PART). This part should feature code.

3.1 Dataset

- loading large amount of data
<https://machinelearningmastery.com/how-to-load-large-datasets-from-directories-for-deep-learning/>
-

3.2 Preprocessing

- image preprocessing documentation

<https://keras.io/preprocessing/image/#imagedatagenerator-class>

3.3 Layer

3.4 Loss-Function

4 Visualization and discussion of your results.

4.1 Training

4.2 Testing