

Machine Learning II Project Proposal

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Data set: Best Artwork of All Time (Kaggle)¹

The data set contains 8,355 resized JPEG files, each is a painting, that belong to 50 most famous artists from all times.

Goal: Predict the Artist and the Genre of a painting.

I am going to use both deep learning network and convolution neural network to predict both the artist and the genre of a painting.

Literature Review

Many researchers have done similar classification work on paintings, following list include a few:

- Nitin Viswanathan²
- Yiyu Hong and Jongweon Kim³
- Tara Balakrishnan, Sarah Rosston and Emily Tang⁴

Data Preprocessing

I am going to clean, standardize and arrange the data into relevant file types.

Algorithm

I plan to use between 4-5 layers, a pooling layer followed by a convolution layer.

¹ <https://www.kaggle.com/ikarus777/best-artworks-of-all-time>

² <http://cs231n.stanford.edu/reports/2017/pdfs/406.pdf>

³ https://www.ripublication.com/ijaer17/ijaerv12n4_17.pdf

⁴ <http://cs231n.stanford.edu/reports/2017/pdfs/410.pdf>