

Project Proposal

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My proposal involves using machine learning to look over a painting and determine who painted it based on many characteristics. The algorithm should be able to determine whether a particular painter painted the picture or if the painting was fraudulent. The algorithm should also be able to look at a painting and determine the painter who most likely painted it. In order for the algorithm to learn what characteristic to look for, eye-tracking technology will be used so the algorithm can learn what professionals are looking at in the painting. With the eye-tracking data, the algorithm can implement a Deep Neural Network to separate the image into separate parts to analyze the specific style points of a painting and compare it to the known styles of famous artists.

The machine learning algorithm will have to be trained with many different paintings with their corresponding artists to understand what each artist's style is. This will be a long process with a lot of data in order for the algorithm to understand the difference between artists. There will most likely be two major uses for this type of algorithm. The first would be for education, the algorithm could help people pinpoint styles and artists to help students learning about art history or art in general. The other large use would be to help fraud detectors in determining fraudulent paintings. This algorithm could point them to things they may have not noticed on the painting. Overall this machine learning algorithm can be pretty influential in the art world and art education world.