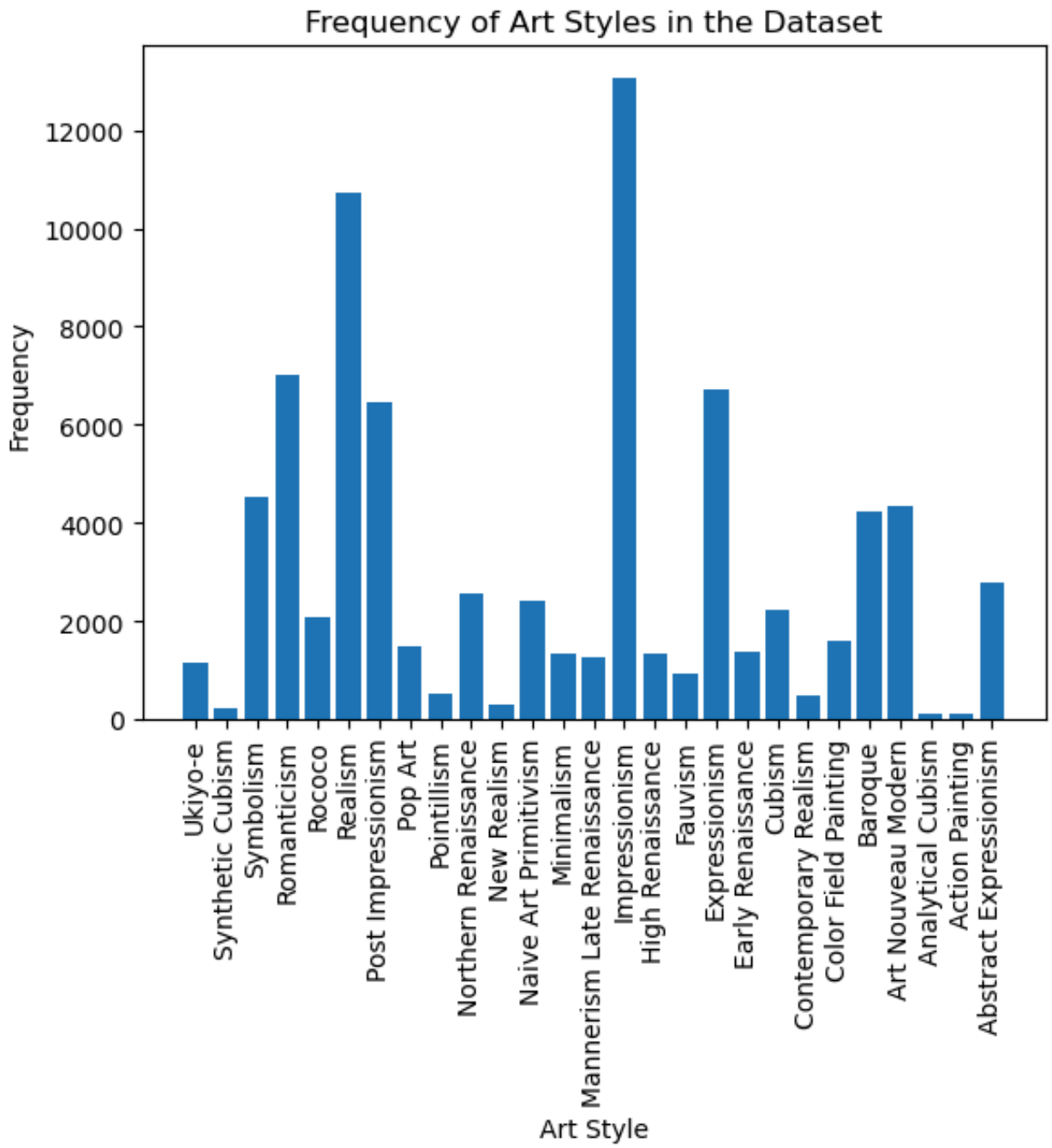
WikiArt Dataset

The unit of observation in this dataset was an image. The relevant variables that were used from this dataset were image ID and style label, both of which were text variables. There were a total of 52,757 images in this dataset, however only _ were used in this study for simplicity purposes. The first variable, *Image_ID* represented a unique identifier for each individual image so that the program could differentiate the various inputs.

Style_Label: This variable represents the style of the images in the dataset, and consists of various frequencies of styles which are shown in the table and graph below. Each image within the picture dataset fell under a specific style that can then be utilized to apply style transfer techniques

Art Style	Frequency
Ukiyo-e	1167
Synthetic Cubism	216
Symbolism	4527
Romanticism	7015
Rococo	2089
Realism	10733
Post Impressionism	6451
Pop Art	1483
Pointillism	513
Northern Renaissance	2550
New Realism	314
Naive Art Primitivism	2405
Minimalism	1337
Mannerism Late Renaissance	1279
Impressionism	13060
High Renaissance	1343
Fauvism	934
Expressionism	6736
Early Renaissance	1391
Cubism	2235
Contemporary Realism	481
Color Field Painting	1615
Baroque	4241
Art Nouveau Modern	4328
Analytical Cubism	110
Action Painting	98

Abstract Expressionism	2782



Stylized Photo Dataset

The unit of observation of this dataset was also images. These images were derived from online image sources and consisted of various pictures including landscapes, animals, text, people, and graphs. The relevant variables used from this dataset were the content image and SSIM score which were image and integer variables respectively.

Content Image: This variable consisted of the original images used in the style transfer techniques. There were a total of ten images used, which were composed of photos of the following: a tiger, a zebra, a city landscape, a road landscape, a beach landscape, UVA evening, the painted ladies, queen elizabeth, a derivative, and the declaration of independence. These ten pictures were used as a baseline and the style of alternative images were applied to them.

SSIM: This variable represented the structural similarity index, and compared the original photo to the processed image. The integer given fell between the numbers 0 and 1, with 1 indicating identical similarity. The purpose of this variable was to recognize the quality of the processed images after they had undergone stylistic transformation. The data from this variable can be seen in the graph below.