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## Kolten C Pearson (koltenpearson@gmail.com), Kolten Pearson, Orem, UT 84097, and Megan Searles\* (megan.d.searles@gmail.com), 999 E 450 N #21, Provo, UT 84606. Using Data Analytics to Teach Computers the Difference between Rembrandt and Monet. Preliminary report.

Data analytics is a new field that uses ideas from mathematics, computer science, and statistics to take large sources of data to derive new results. One technique in data analytics is artificial neural networks. These are inspired by biological neural networks and allow computers to learn based on observational data. In our research we applied this to art classification. Specifically, we fed a large art database through an artificial neural network to have the computer learn how to classify other art images. Now, we are analyzing how different network architectures compare when faced with the task at hand. Our research looks into the discrepancies between different networks in order to find the optimal way to teach our computers to classify art. (Received September 20, 2016)