

July 16

1. Project 2 - Create some Art!
 1. Go to Neural style transfer and complete the tensorflow exercise at that location. Read the linked paper about the method by Gatys et al. Modify the content_image and style_image to produce your own stylized work of art. Minimize the number of epoch runs in order to output your produced image faster for review and consideration. Incorporate the total variation loss method in your script and increase the number of epochs to improve the quality of your stylized artwork. Use your stylized artwork to **draft** an entry for the Jump Start Data Science Summer Program competition. Use your imagination when designing your proposed tee-shirt. Feel free to design either a square shaped space for the front, front and back or a whole of tee-shirt approach. Be sure to identify the Jump Start Data Science Summer Program in your draft entry. Create a GitHub pages site, upload your design, and provide a brief description of the inspiration you drew upon in order to create your work of art!
 1. https://www.tensorflow.org/tutorials/generative/style_transfer
 2. <https://arxiv.org/abs/1508.06576>
 2. Stretch goal #1 - apply the DeepDream implementation as part of your draft entry.
 1. <https://www.tensorflow.org/tutorials/generative/deepdream>
 3. Stretch goal #2 - run the DCGAN script and consider using a generative adversarial network in your design. Feel free to incorporate a dynamic gif as part draft entry.
 1. <https://www.tensorflow.org/tutorials/generative/dcgan>
2. For next week - Think about a research question you wish to investigate, or is interesting to you, and then consider some existing applications of machine learning methods within the context of that question. Think about how the application of a machine learning method could potentially improve description, analysis and inference as it relates to your problem.