

For the preliminary model:

Upload the **preliminary_image_captioning.ipynb** to Google Colaboratory and run the individual cells to get the results.

For the attention model:

Upload the **attention_model_imagecaptioning.ipynb** to Google Colaboratory and run the individual cells to get the results.

The code has been sufficiently commented to help in understanding the working of the models. If there is any problem in running the project, please contact me on a.kunder@tamu.edu for further details.

References:

1. Initial Model:
<https://machinelearningmastery.com/develop-a-deep-learning-caption-generation-model-in-python/>
2. Paper: <https://arxiv.org/pdf/1502.03044.pdf>
3. Show-attend-and-tell:
<https://github.com/yunjey/show-attend-and-tell/blob/master/core/solver.py>
4. arctic-captions(original paper code): <https://github.com/kelvinxu/arctic-captions>
5. Tensorflow Tutorial:
https://www.tensorflow.org/tutorials/text/image_captioning#preprocess_and_tokenize_the_captions
6. Attention:
<https://stackoverflow.com/questions/44238154/what-is-the-difference-between-luong-attention-and-bahdanau-attention>