Assignment 2: Knowledge-aware Image Captioning

Due: 03/25

**Data:**

<http://blender07.cs.illinois.edu:8007/voa_data_2017/>

* Source\_data: image-caption pairs
  + Image\_caption\_mapping.json: the mapping between image and caption
  + Voa\_image: image files
  + Voa\_image\_caption: captions
  + Voa\_article: context documents
* Train/test/valid\_images.txt: data split for training, test and validation
* ie\_result: information extraction results for both captions and context documents

**Task:**

1. **(8-13pt)** Train any baseline deep neural networks model to generate a caption for each image, and report BLEU-4 and ROUGE scores. The grades will be assigned based on the rank of your system among all systems from the class.
2. **(2-7pt)** Use IE results to make the model entity-aware, relation-aware, event-aware, etc. The grades will be assigned based on the rank of your improved system among all systems from the class.
3. **(2pt)** clear and informative written report about your methods, results and findings.