**Introduction**

**Original implementation**

-- Embeddings

-- Inference

**Model selection and hyperparameter settings**

-- Encoder: LeNet, AlexNet, ZFNet, GoogleNet/Inception, VGGNet, ResNet, DenseNet

Final model: Resnet 50, 101, 152

LearningRate, EmbeddingSize, HiddenLayer, Dropout rate, etc.

-- Decoder: LSTM, GRU, Elman/RNN, Bidirectual LSTM

-- Datasets: COCO, Flick8k

-- Metrics: BLEU-1~4, METEOR, CIDEr

**Current progresses**

Compare all kinds of combinations of models; encoding sizes; and draw the train+test loss curves + give the table of BLEU scores and perplexities.

Show pictures that are good, not so good and not relevant.

How many computing hours are cost by now?

**Q&A**

Where is test loss? -- That’s on the table.

**Instructor:** Please be concise on the problem! Don’t review the paper, but focus more on the implementations and architectures.