**ITA Mid Progress Report**

**Chatbot**

**Introduction :**

We are trying to implement a simple chatbot based on a Sequence to Sequence model introduced in Learning Phase Representations using RNN Encoder-Decoder for Statistical Machine Translation. We plan on using the Ubuntu Corpus Dataset for this purpose. The sequence to sequence is a generative model. The main problem will be dealing with the fixed length sequences. We’ll be using techniques like Paddinga and word embedding to deal with this.

**Current Progress :**

* Completed studying basics of Machine Learning.
* Studied various approaches to building a chatbot including retrieval based approaches and generative model approach.
* Further continuing with the original plan of deciding to stick with the generative model approach.
* Setting up a local machine for this project.
  + Visual Studio Community 2013
  + CUDA 8.0
  + Tensorflow
  + Keras

- Studying the mechanics of using Tensorflow to work on Machine Learning by training a smaller dataset on the local machine.