

Project Update Report

Abstractive Text Summarization

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Baseline Model:

We propose to implement a baseline RNN based Sequence-to-Sequence deep learning model with attention for the task of text summarization. The model consists of two parts, an encoder, that understands the input, and represent it in an internal representation, and feed it to another part of the network which is the decoder.

Here we intend to use Long Short Term Memory (LSTM) as our building block for constructing RNN based aggregator model for Encoder as well as Decoder component in our architecture. In the Encoder we mainly use a multi-layer bidirectional LSTM, while in the decoder we use attention mechanism.

Proposed Methodology:

This project is divided into two main components:

- Building text summarization model:

We propose to implement abstractive text summarization model and for this purpose we have chosen to implement the model presented in the following research paper

Bidirectional Attentional Encoder-Decoder Model and Bidirectional Beam Search for Abstractive Summarization

Link: <https://arxiv.org/pdf/1809.06662v1.pdf>

- Building a web based interface to interact with the model

We will provide an interface using which user can provide the document text to summarize and will receive a summary as an output.

Data set: CNN/Daily Mail dataset

Current Status:

- In progress of making baseline model. Working up on improving model.
- Designing up Web Interface

Questionnaire :

- In paper figures showing are doing comparison of model with extractive text summarisation also , do we need to perform that also ?
- Currently we are facing problem in running code on medium size data set , suggest some approach for running the baseline code for medium / larger dataset ?
- Regarding web Interface what are functionality required to do in it ?

