BiDAF Model for Question Answering

By:

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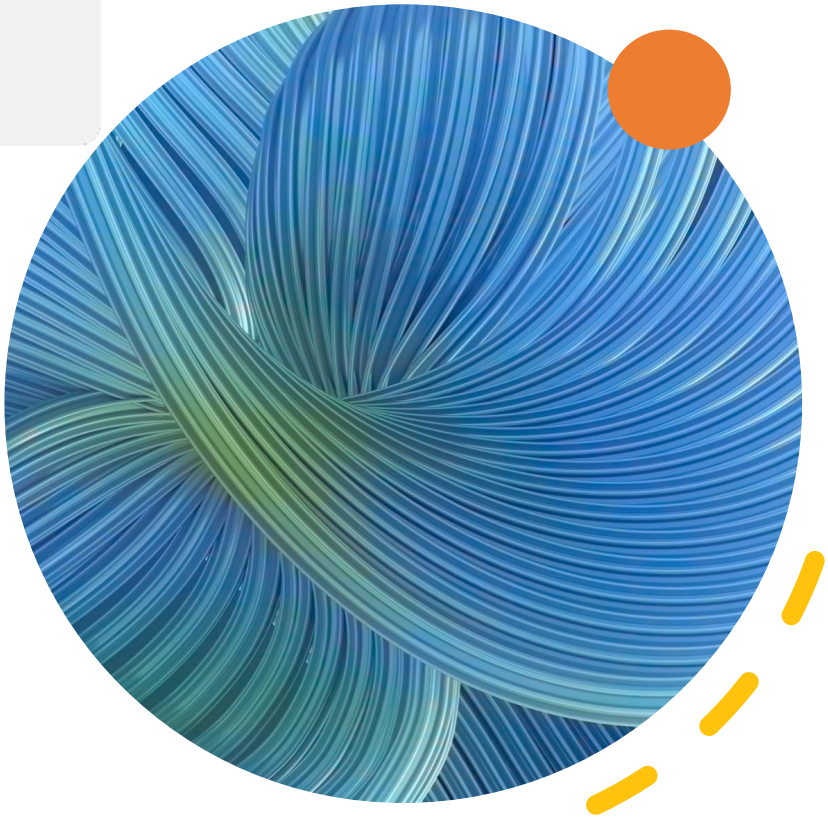
BiDAF is an extractive Q&A model with a closed domain that can only address factoid questions.

Because of these characteristics, BiDAF needs a context to respond to a query.

BiDAF often returns a substring of the given context as an answer.



STATEMENT OF PROJECT:

- In this project we aim to find answers in the SQuAd dataset, which has tens of thousands of paragraph question pairs.
- We are implementing multiple neural networks combining different components known as Bi-directional Attention Flow model (BiDAF) model which is very popular for solving question answering problems in NLP.
- Encoding the question and corresponding context paragraph using GloVe word embeddings.
- Computing an attention matrix and decoding to find the answer to the question in the context paragraph.

APPROACH:

Three different types of question-answering models :

1. Open domain vs closed domain.
2. Abstractive vs Extractive.
3. Ability to answer non factoid questions.

METHODOLOGY:

BiDAF comprises different layers, They are

- Embedding Layers
- Contextual Layer
- Attention and Modeling Layers
- Output Layer

DATASET:

SQuAd Dataset:

URL: https://rajpurkar.github.io/SQuAD-explorer/

Description of Dataset:

This dataset is two separate json files with dev and training data, The data consists of context, its title, several related questions and answers. The dev data consists of 10570 questions and answers.


IMPLEMENTATION:
DESIGN
A
B

DELIVERABLES:

- Power Point Presentation.
- YouTube video.
- GitHub Repository.
- Documentation (README.md)
- Programming Algorithm (.py file)

THANK YOU