CREATE A CHATBOT IN PYTHON

Introduction

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Creating an Input Function

In order to use Tensorflow's built-in support for training and evaluation we need to create an input function — a function that returns batches of our input data.

In fact, because our training and test data have different formats, we need different input functions for them. The input function should return a batch of features and labels.

Steps:

- On a high level, the function does the following:
 - Create a feature definition that describes the fields in our Example file
 - Read records from the input_files with tf.TFRecordReader
 - Parse the records according to the feature definition
 - Extract the training labels
 - Batch multiple examples and training labels
 - Return the batched examples and training labels

Creating the Model

- As we have different formats of training and evaluation data we have to create a function wrapper that take care of bringing the data into the right format.
- It takes a model argument, which is a function that actually makes predictions.
- In our case it's the Dual Encoder LSTM, but we could easily swap it out for some other neural network

Evaluating the model & making Predictions

- After training the model we can evaluate it on the test set.
- This will run the evaluation metrics on the test set instead of the validation set.

- We will get probability scores for unseen data.
- We could imagine feeding in 100 potential responses to a context and then picking the one with the highest score.

Thank You

