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FREIE UNIVERSITY BERLIN

NATURAL LANGUAGE PROCESSING
PROF. DR. ARTHUR M. JACOBS

Summer Semester 2021

GENERATING TEXT/LYRICS BASED ON CHARACTER-LEVEL LANGUAGE MODEL BY MULTI-LAYER RECURRENT NEURAL NETWORK

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1 Abstract

TBD

2 Introduction

Lyrics are the most powerful factor that determines the quality of a song. Generally lyrics is a set of words consisting versus and choruses. The meaning of those words might be abstract or direct. Lyrics writer generally writes lyrics and composer put the rhythm and life to those words. Other than being creative one can write lyrics using different machine learning techniques. For example, Dopeleraning [1] is a approach to predict the next line of existing lyrics based on RankSVM algorithm [2] and deep neural network model with novel structures. In our project we will train character level language modes based on Recurrent Neural Network (RNN) [3] and Long Short-Term Memory (LSTM) [4]. In other words, we will train a large set of texts to generate similar type of text one character at a time. Our goals of this project are:

- Select and prepare a usable dataset of existing song lyrics

- Select an existing module that implements multi-layer Recurrent Neural Network (RNN, LSTM, and GRU) for training from character-level language models on our selected dataset

- Finally, generate some lyrics from our trained model.

3 How to Generate Lyrics

Lyrics writing is a creative work. Generally lyrics construct a meaningful and rhythmic pattern which might be an abstract or direct. We used multi-layer RNN and LSTM to produce this. The reasons of choosing those are explained below:

3.1 Why RNN over

4 Data Analysis

5 Conclusion

6 Acknowledgment

References

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