Joke detection with neural networks

Project Exposé

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1 Introduction

Humor is a fundamental property of humans. Although scholars are analyzing and studying humor since the Ancient Times, it is until today not completely understood. In contrast to other NLP-related problems, the computational treatment of humor is far behind.

Former research in computational humor was mainly carried out on Humor Generation and Humor Detection. As I showed in earlier work (Amin, 2019), none of the humor generators presented so far were able to produce human-like humor. From my investigations I concluded two approaches which seemed promising for the advancement of joke generators – a generative and a restrictive approach. A generative approach to humor generation would aim at exclusively producing humorous output by preselecting suitable topics to joke about. A restrictive approach on the other hand would consist of two systems: A system that produces texts with structural features of jokes and a second humor detection system that works as a filter letting only the humorous texts pass. One approach for such a filter would be a neural network for text classification with the target classes `joke` and `no joke`.

The aim of this project is to assess the feasability of current neural network architectures for text classification for the application as such a joke detector. In the following I will briefly present related work and earlier systems for joke detection. I will proceed by outlining the intended method and the data set that will be used for training the neural network.

Amin (2019)

1.1 Related Work

1.2 Data Set

Take subset of my joke dataset as positive examples

Create jokes with gpt2-simple as negative examples that are similar to jokes but are not jokes

1.3

References

Amin, M. (2019). *Computational humor - Automatic generation of jokes.* Bachelor Thesis, Leipzig University.