## ALC

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Abstract. To do as final step before the proof reading

#### 1 Introduction

Intro over nlp and text classification: motivation why this field is important and the actual challenge and open problems (will be top just to list some problem and their way to be solved, for example citing the different workshop that we had during the course) Introduce informally our task and list some way of tackling this problem from the different perspectives, maybe say that we de-construct the actual approach and cathegorized their inner process in: representation, preprocessing, model and post processing (that we haven't done).

Finally explain how we structured this report

### 2 Problem

description of the problem

- 3 Methods
- 4 Representation
- 5 Preprocessing
- 5.1 Stemming
- 5.2 Stop words
- 5.3 Cleaning

Url.

R-W.

5.4 Tokenizing

Mentions.

Smiles.

Emoji.

Numbers.

- 6 Models
- 6.1 Statistical models

Random forest.

Decision tree.

Support vector machines.

6.2 Neural models

Multilayer perceptron.

Long short term memory.

Bidirectional long short term memory.

Convolutional neural network.

Convolutional neural network with .

- 7 Evaluation
- 8 Conclusions

# Bibliography