Swiss German Speech to Standard German Text

SwissText.org Shared Task 3

Anonymous ACL-IJCNLP submission

Abstract

This paper analyzes and implemented models for the shared task 3 from the SwissText conference on translating swiss german speech to standard german text and presents the findings. We implemented multiple *DeepSpeech* models using the data provided by SwissText.org as well as additional data. An additional experiment with a sequence to sequence translation model was trained in order to improve our score. We achieved a BLEU score of up to 0.17 on the test set of SwissText.

1 Introduction

Swiss German has a wide variety of different dialects, with a huge difference in words, pronunciation, even to the point of sounding like a different language. Tackling a standardized translation of different spoken Swiss German dialects into standardized German text requires a vast amount of data and fine tuning. The stc 2021 proposed a shared task to tackle this problem and provided a dataset (stcd to train and fine tune on. This paper shows what kind of experiments, data, and approaches the authors used to tackle this problem.

2 Materials and Methods

3 Experiments & Results

3.1 Datasets

We compared models on both the dataset provided by the stc as well as the ArchiMob corpus. The stcd contains 38 GB of labeled and 65 GB of unlabeled spoken swiss german audio data and an additional validation set containing 1.5 GB of data (**?**). The ArchiMob corpus (Release 2) contains X GB of spoken swiss german data (**?**).

3.2 Results

Model#	Data	Train BLEU	Test BLEU
1	SwissText	0.23	0.0004
2	ArchiMob	0.27	**0.17**
3	ArchiMob	0.24	0.07

Table 1: Font guide.

4 Discussion

5 Conclusion

(**?**)