Hes·so// FRIBOURG FREIBURG
Haute Ecole Spécialisée de Suisse occidentale
Fachhochschule Westschweiz

iCoSys
Institute of Complex Systems

swisscom

SwissTranslation
Translation of Swiss German to High German

Realization @ HES-SO
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Keywords
- Neural Machine Translation
- Deep learning
- NLP

Our skills
Machine Learning, Resourcefulness / out-of-the-box thinking

Valorization
Inclusion and valorization of Swiss German, a primary constituent of Swiss culture
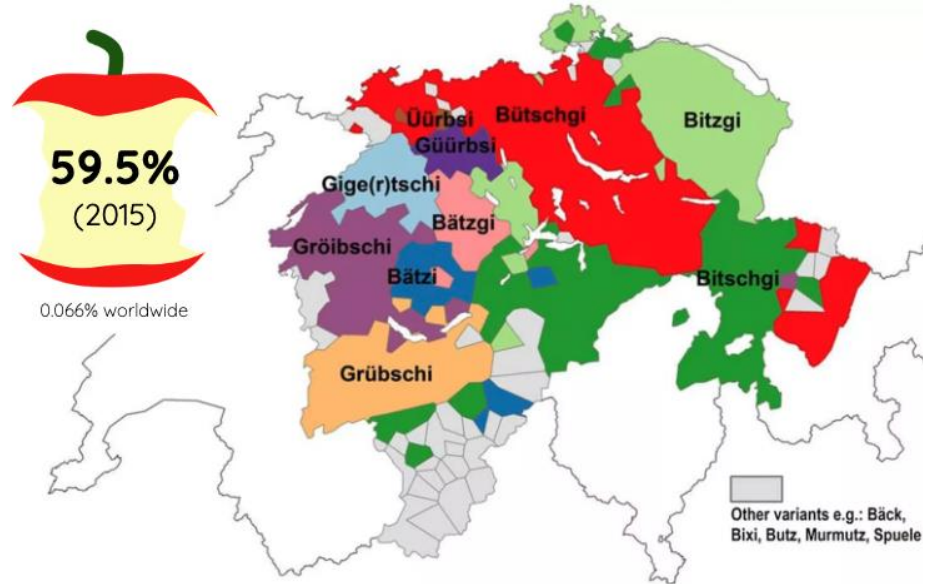
Partnership
- Swisscom

Funding
Swisscom – HES-SO

Schedule
April 2019 – April 2022

Used in daily interactions by more than 60% of the Swiss population, **Swiss German** is an integral part of the Swiss identity and culture.

Nowadays, Swiss German speakers have to switch to another language, such as High German, French, Italian, or English, if they want to profit from **automatic translation** or **speech recognition** services. Swiss German is mostly a spoken language, only rarely appears in writing, has a large number of different dialects, and no standardized orthography. Hence it is not surprising that the current state of the art in natural language processing (NLP) fails for this challenging case.

"If we could communicate with all machines as easily as with other people, our daily lives would be very much easier."
– Marc Steffen

In collaboration with Swisscom, the Institute of Complex Systems tackles this challenge. Leveraging recent breakthroughs in **weakly supervised deep learning technologies**, the project aims to develop novel methods for automatic translation from Swiss German to High German that are able to cope with a lack of large text corpora.