Poster: Predicting the Outcome of Votes Taken by the Swiss National Council Applying Machine Learning Models

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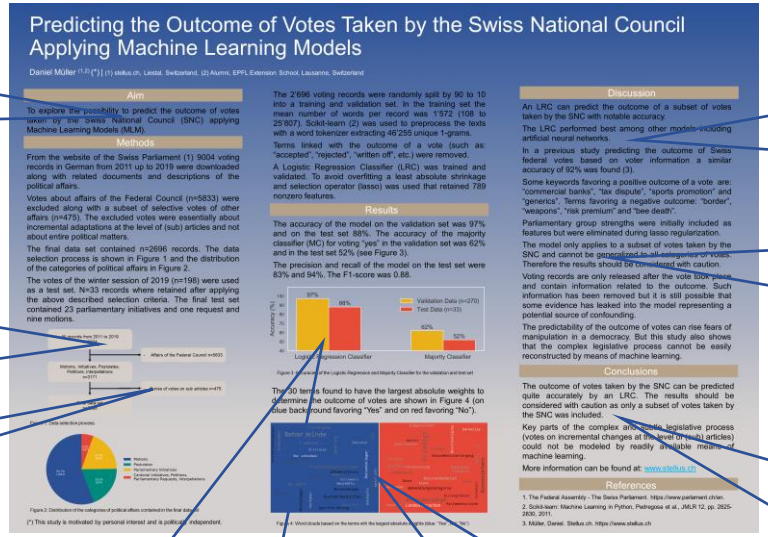
To accurately predict the outcome of votes taken by the Swiss National Council

2696 out of 9004 votes from 2011 to 2019 were used to train and validate a Logistic Regression Classifier

Votes on «incremental adaptations» of bills were excluded. Votes of the winter session 2019 were used as test set



The model predicted the outcome of votes on the validation set with an accuracy of 97% and on the test set with 88%

Word clouds based on feature importance showing terms weighting towards «Yes» or «No»

The Logistic Regression Classifier performed better than models based on Artificial Neural Networks

Ex post information about the outcome of votes needed to be kept from leaking into the model

Open question: How could the full legislative process with votes on small adaptations of (sub) articles be modeled by Machine Learning?

(*) This study is motivated by personal interest and is politically and financially independent