Framework for BERT Based NLP Models with Applications to Warranty Policy Loss Prediction

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Abstract

This presentation focus on Natural Language Processing (NLP) applications in actuarial science. NLP techniques, as powerful text analytic tools, can help actuaries to exploit the information in textual data. NLP techniques have been applied in different research fields, but only a few NLP applications can be found in actuarial science. The NLP tool helps to extract information from the textual description in the claim records, and the extracted features can be used to predict the loss severity and the frequency. We specifically develop and apply BERT-based loss severity and frequency models to predict future aggregate losses in auto warranty policies.