

## **Abstract**

This thesis analyzes behavior of customers on an e-commerce website in order to predict whether the customer is willing to buy something or is just window shopping. In addition the secondary model predicts, if the customer is going to leave the e-commerce website in next few clicks. To answer this questions different frameworks are tested. The base model used is the Logit model. The base model is compared with more sophisticated methods in machine learning - with neural networks. The best results were yielded by Recurrent neural network - the Long Short-Term Memory (LSTM). The results of the analysis confirm importance of the click stream data and calculated features that track user behavior on the e-commerce website, type of the page (product, category, information), product variance and category variance. The thesis emphasizes practical implications of this models. Two possible practical implementations are presented. The models are tested in novel ways to see how would they perform if implemented on the real e-commerce website.