

## Predicting the helpfulness score of videogames of the STEAM platform

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### **Abstract**

*Online reviews comprise a flood of user-generated content, so to identify the most useful reviews is a vital task. As such, many computational models have been made to automatically analyze the helpfulness of online reviews. In this work, we aim to predict the helpfulness score of videogames reviews using an available online dataset of more than 1M rows. We trained three different machine learning algorithms by implementing two strategies, predicting the helpfulness as a regression problem or as a binary classification problem. Our findings show that binary classification is the best method, and the achieved ROC-AUC of the best model is 0.7 with only a selected set of features. In addition, we found that using the feature vectors from a pretrained NLP model does not improve the performance of the models.*

**Keywords:** *Videogames; helpfulness; machine learning; NLP; online reviews*

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