

	Neural Feature Embedding for User Response Prediction in Real-Time Bidding
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	<p>In the area of ad-targeting, predicting user responses is essential for many applications such as Real-Time Bidding (RTB). Many of the features available in this domain are sparse categorical features. This presents a challenge especially when the user responses to be predicted are rare, because each feature will only have very few positive examples. Recently, neural embedding techniques such as word2vec which learn distributed representations of words using occurrence statistics in the corpus have been shown to be effective in many Natural Language Processing tasks. In this paper, we use real-world data set to show that a similar technique can be used to learn distributed representations of features from users web history, and that such representations can be used to improve the accuracy of commonly used models for predicting rare user responses.</p>