

Happy Dance, Slow Clap: Using Reaction GIFs to Predict Induced Affect in Twitter is a paper authored by Boaz Shmueli of the Social Networks and Human-Centered Computing and the Institute of Information of Academia Sinica, and the Institute of Service Science of the National Tsing Hua University, Soumya Ray of the Institute of Service Science of the National Tsing Hua University, and Lun Wei Ku of the Institute of Information of Academia Sinica that details their solution to the lack of datasets in natural language processing research and implementation that include induced emotion labels. The paper explains how many natural language processing data sets are limited at the moment to only including perceived emotion labels, which is the emotion a reader recognizes from the text. But these datasets lack any labeling for induced emotion, which is how the text makes a reader feel, due to the complexity, unreliability, and expense manual labeling would incur. In the past others have tried to accomplish an automatic labeling method using emoji reactions but this severely limited the accuracy, due to ambiguity or misunderstanding, and emotional range available. To circumvent this issue the author's proposed a more complex reaction system of using labeled GIFs to gauge the induced emotion a post on twitter has. The authors used the built in reaction categories on twitter to define a certain set of the reaction GIFs available under the categories and mapped the categories to emotion labels, as well as clustering the categories to map them to sentiment labels. The authors propose that the dataset, being the first of its kind, could be used to promote future research by offering baseline predictors for reactions, sentiment, and emotions induced by tweets. In the experiment four models were used: a majority class classifier, a logistic regression classifier, and convolutional neural network, and RoBERTa. When considering their

predictions and which of their proposed models produced the best results they looked at the affective reaction prediction (multiclass classification technique where the reaction category is predicted), the induced sentiment prediction (binary classification task at predicting sentiment of a specific tweet), and the induced emotion prediction which uses their reaction-to-emotion transformation for predicting emotion (27-emotion multi labeled classification task to capture complex emotional states) in all of which which RoBERTa performed the best. The authors consider that the large number of reaction categories makes prediction challenging, as well as the affective overlap between categories but propose mapping reactions to emotions with a larger data set and new evaluation metrics. The authors were transparent about their data collection methods and their annotation methods in the paper to clear up any misunderstandings as well. Overall the paper proposes that the dataset would prove useful in inferring reader's induced emotions which can be used in content filtering, or serve some use in assistive computing applications. Boaz Shmueli has 1390 citations, Soumya Ray has 2516 citation under the email used in the paper, and Lun Wei Ku has 2839 citations on Google Scholar. The work dataset and models developed for the paper are pretty interesting and add a new layer of complexity to emotion analysis of text. I personally think it was a cool idea for a project and that it would help to create a robust classification method of induced emotion that can be used to cater to and predict reader's reactions to certain ideas, topics, or services. The author who has the most citations on Google Scholar is Lun Wei Ku who is the final author listed in the list of author's. Overall the paper was well formatted, easy to understand and had a well

thought about idea for a dataset that could see a lot of uses in the wider natural language processing research field.