## Visual Analysis of Sentiment and Stance in Social Media Texts

Kostiantyn Kucher\* Linnaeus University, Sweden **Carita Paradis** Lund University, Sweden

Andreas Kerren Linnaeus University, Sweden

Despite the growing interest for visualization of sentiments and emotions in textual data, the task of detecting and visualizing various stances is not addressed well by the existing approaches. The challenges associated with this task include development of the underlying computational methods and visualization of the corresponding multi-label stance classification results. In this poster abstract, we describe the ongoing work on a visual analytics platform, called StanceVis Prime, which is designed for analysis of sentiment and stance in temporal text data from various social media data sources. Our approach consumes documents from several text stream sources, applies sentiment and stance classification, and provides end users with both an overview of the resulting data series and a detailed view for close reading and examination of the classifiers' output. The intended use case scenarios for StanceVis Prime include social media monitoring and research in sociolinguistics.





Visualization of sentiment and stance data series discovered in social media data in StanceVis Prime: (a) a list of tracked targets of interest, corresponding data domains, and detected subjectivity categories; (b) a stacked graph representing the processed document counts and cues about detected subjectivity levels; (c) a slider controlling the threshold for displaying subjectivity cues in (b); (d) a range slider providing an overview about the complete data set; (e) bar charts representing sentiment and stance data series; (f) a document view panel; and (g) a tooltip with detailed sentiment and stance classification results for a specific document.

Here, the user loaded a Twitter data set on two targets of interest: the Trump investigation and European politics. The user then decided to focus on an area with an increased number of documents on European politics, which happened to be the dates around March 4, 2018, when a general election took place in Italy. After investigating temporal trends related to the targets of interest and sentiment & stance classification results, the user switched to close reading using the document view.

\*Contact: kostiantyn.kucher@lnu.se







