AnnoDiver: Applying Visual Analytics on Social Annotations to Facilitate Balanced Research Paper Discourse

Authors: Jasmine Shih, Nick Feffer, Miroslav Suzara, Kevin Wang

Summary:

Prior work has shown that it can be difficult to navigate a large volume of social annotations and that establishing diverse discussions remains a challenge, particularly in university classroom settings. To address this, we developed a prototype social annotation tool that displays interactive visualizations of annotation threads. The visualizations included: 1) a bar chart that displays the counts of different categories of comments, 2) a sentiment axis that shows the sentiment distribution, and 3) a key term frequency list that displays the most frequent terms in the comments. In a user study, we found that users who interacted with the visualizations explored more annotation threads and created more comments, although the diversity of categories of comments created did not change. Our results provide design insights and inspire future research directions on the roles of interactive visualizations on social annotation data.

ACM Author Affiliations: Jasmine Yen-Ching Shih: Stanford University; Nick Feffer: Stanford University; Miroslav Ivan Suzara: Stanford University; Kevin Wang: Stanford University