## **Text Annotation Graphs 1**

Forbes, Angus G., Kristine Lee, Gus Hahn-Powell, Marco A. Valenzuela-Escárcega, and Mihai Surdeanu. 2018. Text Annotation Graphs: Annotating Complex Natural Language Phenomena. Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC'18). May 7-12, 2018, Miyazaki, Japan. Ed. by Sara Goggi and Hélène Mazo. European Language Resources Association (ELRA). arXiv preprint arXiv:1711.00529 (2017).

This paper introduces a new web-based software tool for annotating text, Text Annotation Graphs, or TAG. It provides functionality for representing complex relationships between words and word phrases that are not available in other software tools, including the ability to define and visualize relationships between the relationships themselves (semantic hypergraphs). Additionally, we include an approach to representing text annotations in which annotation subgraphs, or semantic summaries, are used to show relationships outside of the sequential context of the text itself. Users can use these subgraphs to quickly find similar structures within the current document or external annotated documents. Initially, TAG was developed to support information extraction tasks on a large database of biomedical articles. However, our software is flexible enough to support a wide range of annotation tasks for any domain. Examples are provided that showcase TAG's capabilities on morphological parsing and event extraction tasks. The TAG software is available at: <a href="this https URL">this https URL</a> CreativeCodingLab/TextAnnotationGraphs.

https://creativecoding.soe.ucsc.edu/angus/ https://github.com/CreativeCodingLab/TextAnnotationGraphs

