Siyi Liu

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Github: github.com/liusiyi641

Research Interests

My primary research interest lies in the intersection of machine learning and natural language understanding. I am generally interested in understanding the implications from news sources, including their *perspectives* and *frames*. I am also interested in multi-modality learning, low resource/zero-shot NLP, NLP for social good, and other applications of NLP.

Education

Boston University, Boston, MA

2016-2020

B.A./M.S. Dual Degree in Computer Science

Advisor: Derry Wijaya

University of Pennsylvania, Philadelphia, PA

2020-2022

M.S.E. in Computer and Information Science

Advisor: Dan Roth

Publications

[1] Siyi Liu, Sihao Chen, Xander Uyttendaele, Dan Roth

"MultiOpEd: A Corpus of Multi-Perspective News Editorials", in NAACL 2021.

[Paper][Slides/Talk/Poster]

[2] Siyi Liu, Lei Guo, Kate Mays, Margrit Betke and Derry Tanti Wijaya.

"Detecting Frames in News Headlines and Its Application to Analyzing News Framing Trends Surrounding U.S. Gun Violence." In *Proceedings of Conference on Computational Natural Language Learning* (CoNLL) 2019.

[Paper] [Slides]

[3] Siyi Liu*, Ziang Leng*, Derry Tanti Wijaya.

"Learning To Mirror Speaking Styles Incrementally." in arxiv.

Paper]

Research Experience

University of Pennsylvania

Summer 2020 – Present

Advisor: Prof. Dan Roth

Project: Information Pollution Project

- Discovering and analyzing the argumentation structure in news editorials
- Developing a demo website that presents news articles with different perspectives
- Designing an argument similarity metric based on evidence

Boston University

Spring 2019 – Fall 2020

Advisor: Prof. Derry Wijaya

Projects:

- Detecting Frames in News Headlines and Analyzing News Framing Trends Surrounding U.S. Gun Violence
- Capturing and Transforming Speaking Styles in a Low Resource Setting
- Creating Multimedia Summaries Using Tweets and Videos

City University of Hong Kong

Advisor: Prof. Junhui Wang Aug 2019 - Sep 2019

Project: Analyzing Chinese Law Documents and Clustering Similar Case Descriptions

Awards

Undergraduate Research Opportunity Program Award, Boston University

Dean's List, College of Arts and Sciences, Boston University

Dean's List, College of Arts and Sciences, Boston University

Spring 2018

Skills

Programming Languages: Python (proficient), Java, C, C#, Latex Tools (proficient): Huggingface Transformers, Pytorch, nltk, sklearn

Services

Reviewers: AAAI 2021 (secondary)