Zihao He

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Research Interest

Natural Language Processing, Computational Social Science

Education

University of Southern California

Los Angeles, CA, USA

Doctor of Philosophy, Computer Science; GPA: 3.91/4.00

Aug 2019 – present

Advisor: Prof. Kristina Lerman

Beijing University of Posts and Telecommunications

Beijing, China

Bachelor of Engineering, Communications Engineering; GPA: 90.38/100, Rank: 7/556

Sep 2014 - Jun 2018

Publications and Preprints

[20] How Susceptible are Large Language Models to Ideological Manipulation?

Kai Chen, Zihao He, Jun Yan, Taiwei Shi, Kristina Lerman

Preprint

[19] Whose Emotions and Moral Sentiments Do Language Models Reflect?

Zihao He, Siyi Guo, Ashwin Rao, Kristina Lerman

Preprint.

[18] Characterizing Online Eating Disorder Communities with Large Language Models

Minh Duc Chu, Aryan Karnati, Zihao He, Kristina Lerman

Preprint.

[17] IsamasRed: A Public Dataset Tracking Reddit Discussions on Israel-Hamas Conflict

Kai Chen, Zihao He, Keith Burghardt, Jingxin Zhang, Kristina Lerman

Preprint.

[16] The Pulse of Mood Online: Unveiling Emotional Reactions in a Dynamic Social Media Landscape

Siyi Guo, <u>Zihao He</u>, Ashwin Rao, Fred Morstatter, Jeffrey Brantingham, Kristina Lerman

Preprint.

[15] Reading Between the Tweets: Deciphering Community Worldviews through Language Models and Network Interactions

Zihao He, Ashwin Rao, Siyi Guo, Negar Mokhberian, Kristina Lerman

Findings of EACL 2024.

[14] Measuring Online Emotional Reactions to Offline Events

Siyi Guo, Zihao He, Ashwin Rao, Eugene Jang, Yuanfeixue Nan, Fred Morstatter, Jeffrey Brantingham, Kristina Lerman ASONAM 2023.

[13] CPL-NoViD: Context-Aware Prompt-based Learning for Norm Violation Detection in Online Communities

Zihao He, Jonathan May, Kristina Lerman

ICWSM 2024.

[12] Socio-Linguistic Characteristics of Coordinated Inauthentic Accounts

Keith Burghardt, Ashwin Rao, Siyi Guo, Zihao He, Georgios Chochlakis, Baruah Sabyasachee, Andrew Rojecki, Shri Narayanan, Kristina Lerman

ICWSM 2024.

[11] ALCAP: Alignment-Augmented Music Captioner

Zihao He, Weituo Hao, Wei-Tsung Lu, Changyou Chen, Kristina Lerman, Xuchen Song EMNLP, 2023.

[10] Anger Breeds Controversy: Analyzing Controversy and Emotions on Reddit

Kai Chen, Zihao He, Rong-Ching Chang, Jonathan May, Kristina Lerman

SBP-BRiMS, 2023.

[9] Infusing Knowledge from Wikipedia to Enhance Stance Detection

Zihao He, Negar Mokhberian, Kristina Lerman

ACL, 2022 (Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis).

[8] Speaker Turn Modeling for Dialogue Act Classification

Zihao He, Leili Tavabi, Kristina Lerman, Mohammad Soleymani Findings of EMNLP, 2021.

[7] Detecting Polarized Topics Using Partisanship-aware Contextualized Topic Embeddings

Zihao He, Negar Mokhberian, António Câmara, Andrés Abeliuk, Kristina Lerman Findings of EMNLP, 2021.

[6] The emergence of heterogeneous scaling in research institutions

Keith A Burghardt, Zihao He, Allon G Percus, Kristina Lerman Communications Physics, 2021.

[5] Graph Embedding with Personalized Context Distribution

<u>Zihao He</u>, Di Huang, Yuzhong Huang, Kexuan Sun, Sami Abu-El-Haija, Bryan Perozzi, Kristina Lerman, Fred Morstatter, Aram Galstyan

Companion Proceedings of the Web Conference, 2020.

[4] Training interpretable convolutional neural networks by differentiating class-specific filters

Haoyu Liang, Zhihao Ouyang, Yuyuan Zeng, Hang Su, Zihao He, Shu-Tao Xia, Jun Zhu, Bo Zhang ECCV, 2020.

[3] Neural style transfer with content discrimination

Xiyu Yan, Yeli Xing, <u>Zihao He</u>, Tao Dai, Yong Jiang, Shu-Tao Xia ICME Workshop, 2019.

[2] Attentiondrop for convolutional neural networks

Zhihao Ouyang, Yan Feng, Zihao He, Tianbo Hao, Tao Dai, Shu-Tao Xia ICME Workshop, 2019.

[1] Automatic Grassland Degradation Estimation Using Deep Learning.

Xiyu Yan, Yong Jiang, Shuai Chen, <u>Zihao He</u>, Chunmei Li, Shu-Tao Xia, Tao Dai, Shuo Dong, Feng Zheng IJCAI, 2019.

Experience

Research Intern@Tiktok

Audio-Language Multimodal Representation Learning.

San Jose, CA, USA

May 2023 - Aug 2023

Research Intern@Tiktok

Automatic Generation of Music Interpretation (music2text).

Santa Clara, CA, USA

May 2022 - Aug 2022

Applied Science Intern@Amazon Inc.

Book Recommendation with Raw Content with Natural Language Processing.

Seattle, WA, USA (Remote)

 $May\ 2021 - Aug\ 2021$

Algorithms Development Intern@Didi Chuxing.

AMulti-task Learning for Multi-label Driver Misbehavior Classification.

Beijing, China Apr 2019 – July 2019

Academic Services

Reviewer

- EMNLP 2022, ACL 2023
- SIGKDD 2022&2020, WSDM 2021&2020, WWW 2021, CCS 2021
- TrustNLP@ACL 2023, R²HCAL@AAAI 2023, TEACH@ICML 2023, Connection Science 10/2022

Awards & Achievements

- Annenberg Fellowship, University of Southern California, 2019
- National Scholarship for Excellent Academic Performance (top 1.2%), 2018
- \bullet Meritorious Winner for the Interdisciplinary Contest in Modeling (top 10%), 2017
- Second Prize for the Chinese Mathematics Competitions (top 7.5%), 2017
- First Prize for National English Contest for College Students (top 0.6%), 2017