Danqing Wang

Research Interest: Interested in various generation tasks, including large language models and biological sequences. Devoted to helping the machine generate new content that benefits human life. Mainly focus on (but not limited to):

o Reasoning and Planning in Large Language Models: Multi-agent Collaboration, Alignment, etc.

o Al for Science: Peptide Design, Antibody Discovery, etc.

Github: https://github.com/dqwang122 **Scholar**: Google Scholar, Semantic Scholar

Education

_	PhD in Language Technologies Institute , <i>Carnegie Mellon University</i> Advisor: Prof. Lei Li
2022 – 2023	PhD in Computer Science, UC, Santa Barbara Advisor: Prof. Lei Li
2018 – 2021	Master in Computer Science, Fudan University Advisor: Prof. Xipeng Qiu and Prof. Xuanjing Huang
2014 - 2018	Bachelor in Computer Science and Technology, Fudan University

Experience

Ranking: Top 10%

2023.6 - Research Scientist Intern, Meta	AI (FAIR)
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2024.1 Advisor: Yuandong Tian

2020.4 - Research Scientist, ByteDance Research (Al Lab)

2022.8 Advisor: Jiaze Chen, Hao Zhou, and Lei Li

Main Publications

Large Language Models

Preprint on	Learning Personalized Alignment for Evaluating Open-ended Text Generation %
arXiv	Danqing Wang, Kevin Yang, Hanlin Zhu, Xiaomeng Yang, Andrew Cohen, Lei Li, Yuandong Tian
EMNLP 2023	Learning from Mistakes via Cooperative Study Assistant for Large Language Models %
	Danqing Wang, Lei Li
EMNLP 2023	Instructscore: Towards Explainable Text Generation Evaluation with Automatic Feedback %
	Wenda Xu, Danqing Wang, Liangming Pan, Zhenqiao Song, Markus Freitag, William Yang Wang, Lei Li

NeurlPS 2023 **ALGO: Synthesizing Algorithmic Programs with Generated Oracle Verifiers %** *Kexun Zhang, Danqing Wang, Jingtao Xia, William Yang Wang, Lei Li*

Al for Science

KDD 2024	Global Human-guided Counterfactual Explanations for Molecular Properties via Reinforcement
	Learning %

<u>Danqing Wang</u>*, Antonis Antoniades*, Kha-Dinh Luong, Edwin Zhang, Mert Kosan, Jiachen Li, William Yang Wang, Ambuj Singh, Lei Li

ICLR 2023 On Pre-training Language Model for Antibody & Danqing Wang, Fei Ye, Hao Zhou

KDD 2023 Accelerating Antimicrobial Peptide Discovery with Latent Structure %

Danqing Wang, Zeyu Wen, Fei Ye, Lei Li, Hao Zhou

Text Summarization

ACL 2021 Contrastive Aligned Joint Learning for Multilingual Summarization %

Finding Danqing Wang, Jiaze Chen, Hao Zhou, Xipeng Qiu, Lei Li

ACL 2020 Heterogeneous Graph Neural Networks for Extractive Document Summarization & Danqing Wang*, Pengfei Liu*, Yining Zheng, Xipeng Qiu and Xuanjing Huang

- ACL 2020 Extractive Summarization as Text Matching & Ming Zhong*, Pengfei Liu*, Yiran Chen, Danqing Wang, Xipeng Qiu and Xuanjing Huang
- ACL 2019 Searching for Effective Neural Extractive Summarization: What Works and What's Next & Ming Zhong*, Pengfei Liu*, Danqing Wang, Xipeng Qiu, Xuanjing Huang

Academic Services

- o Program Committee of ICML, ICLR, NeurIPS, ACL, EMNLP, AAAI
- o TA for CS190I Deep Learning (Winter 2023) and CS165B Machine Learning (Spring 2023)
- Local Organization Chair of Socal NLP Symposium 2022

Honor

- 2022 Academic Excellence Fellowship
- **2021** Shanghai Outstanding Graduates (5% of graduates)
- **2020** Venustech Scholarship (1% of Fudan students)
- 2019 Scholarship for Outstanding Students (First Prize)
- 2017 Fudan's Undergraduate Research Opportunities Program