Wei Liu

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Education

2021–on   **MSc in Computer Science**, ShanghaiTech University, China. (GPA: 3.83/4.0)

2017–2021 **BSc in Computer Science**, South China Agricultural University, China (GPA: 4.23/5.0, Top2%)

Research Interests

Efficient Sequence Modeling: Exploring more efficient model architecture, particularly for long-range sequence.

Structured Predictions: Parsing and application of parsing algorithm in downstream tasks.

Deep Generative Models: Deep Latent-variable models.

Large Language Models (LLMs): Explorations of their Emergent Capabilities and Applications in Complex Scenarios.

Publications (* denotes equal contribution)

2023   Structured Mean-Field Variational Inference for Higher-Order Span-Based Semantic Role (submitted to ACL2023)

2023   Joint Entity and Relation Extraction with Span Pruning and Hypergraph Neural Networks (submitted to ACL2023)

2022   Dynamic Programming in Rank Space: Scaling Structured Inference with Low-Rank HMMs and PCFGs (Top 3 Score in ARR Jan 2022)
Songlin Yang*, **Wei Liu***, Kewei Tu.
In Proceedings of NAACL, 2022. | GitHub: VPeterV/RankSpace-Models

2021   Knowledge-Based Chat Detection With False Mention Discrimination
Wei Liu, Peijie Huang, Dongzhu Liang, Zihao Zhou
In Proceedings of ICASSP, 2021.

2019   A Knowledge-gated Mechanism for Utterance Domain Classification.
Zefeng Du, Peijie Huang, Yuhong He, **Wei Liu** and Jiankai Zhu
In Proceedings of NLPCC, 2019.

Internships

2022–on   **Research Intern**, Alibaba DAMO Academy, China
- Doing some research about pre-trained language models and few-shot learning
- One of the developers of GitHub: modelscope/AdaSeq
- MAOE (Paper underwriting): A pre-trained language model that supports (ultra-)fine-grained named entity recognition) | Welcome to try out our model: Try it now

Competitions

2019   **Ranked 8th out of 125 teams/Ranked 2nd in two Sub-tasks** The 3rd Evaluation of Chinese Human-Computer Dialogue Technology, Shared-task 1: Chinese Natural Language Understanding.

Major Awards and Honors

Outstanding Graduate South China Agricultural University (2021)

The First-class Scholarship South China Agricultural University (2021)

The WENS Scholarship South China Agricultural University (2018,2019)

The Second-class Scholarship South China Agricultural University (2018,2019,2020)

Programming Contest Second Prize, South China Agricultural University Programming Contest (2018)

Extra-Curricular

2023–on **Teaching Assitant** CS241A, Natural Language Processing

2019–2020 **Vice Chairman** Science and Technology & Competition Service Center

Volunteering

Volunteer Guangzhou Marathon 2018

Certificate

CET-4, CET-6, TOEFL