Zifeng Ding

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Education

Ludwig Maximilian University of Munich

Jun 2021 – present

- Ph.D. of Computer Science (Supervisor: Volker Tresp)
- Main focus: graph machine learning, natural language processing (NLP).

Technical University of Munich

Oct 2018 - Mar 2021

• Master of Electrical and Computer Engineering (passed with distinction)

East China Normal University

Sept 2014 - Jun 2018

• Bachelor of Electrical Engineering (Microelectronics Science and Engineering)

Professional Experience

University of Cambridge

Oct 2024 – present

- Research Associate @ Cambridge NLP Group
- Working with Prof. Andreas Vlachos. Topics include but not restricted to: temporal reasoning with large language models (LLMs), multimodal fact-checking, synthetic data generation for LLMs.

University of Oxford

Apr 2024 - Oct 2024

- Visiting Researcher (Supervisor: Michael Bronstein)
- Focus on graph machine learning and NLP. Topics include: state space model for dynamic graph representation learning, LLM hallucination detection and mitigation.

European Laboratory for Learning and Intelligent Systems (ELLIS)

Nov 2023 - present

• Nominated Ph.D. at ELLIS (Supervisor: Volker Tresp, Michael Bronstein)

Siemens AG

Jun 2021 – Aug 2024

- Ph.D. Student
- Implementing graph machine learning techniques and LLMs in industrial use cases. Designing LLMbased system for automated supply chain management.

Selected Publications (Reverse Chronological Order)

Full Publication List on Google Scholar Page: https://scholar.google.com/citations?user=8RapuD4AAAAJ&hl=en

- <u>Ding, Z.</u>, Wu, J., Wu, J., Xia, Y., Xiong, B., Tresp, V., **Temporal Fact Reasoning over Hyper-Relational Knowledge Graphs**, EMNLP (2024).
- <u>Ding, Z.</u>, Cai, H., Wu, J., Ma, Y., Liao, R., Xiong, B., Tresp, V., zrLLM: Zero-Shot Relational Learning on Temporal Knowledge Graphs with Large Language Models, NAACL (2024) Oral.

- Wang, Z., Han, Z., Chen, S., Xue, F., <u>Ding, Z.</u>, Xiao, X., Tresp, V., Torr, P., Gu, J., Stop Reasoning! When Multimodal LLM with Chain-of-Thought Reasoning Meets Adversarial Image, COLM (2024).
- Xia, Y.*, Shi, L.*, <u>Ding, Z.</u>, Henriques, J. F., Cremers, D., <u>Text2Loc: 3D Point Cloud Localization from Natural Language</u>, CVPR (2024).
- <u>Ding, Z.</u>, Qi, R., Li, Z., He, B., Wu, J., Ma, Y., Meng, Z., Chen, S., Liao, R., Han, Z., Tresp, V.,
 ForecastTKGQuestions: A Benchmark for Temporal Question Answering and Forecasting over Temporal Knowledge Graphs, ISWC (2023).
- Han, Z., Liao, R., Gu, J., Zhang, Y., <u>Ding, Z.</u>, Gu, Y., Köppl, H., Schütze, H., Tresp, V., ECOLA: Enhanced Temporal Knowledge Embeddings with Contextualized Language Representations, ACL (2023).
- <u>Ding, Z.</u>, Wu, J., He, B., Ma, Y., Han, Z., Tresp, V., Few-Shot Inductive Learning on Temporal Knowledge Graphs using Concept-Aware Information, AKBC (2022) Honorable Mention.
- Han, Z.*, <u>Ding, Z.*</u>, Ma, Y., Gu, Y., Tresp, V., <u>Learning Neural Ordinary Equations for Forecasting Future Links on Temporal Knowledge Graphs</u>, EMNLP (2021),*equal contribution.

Honors & Awards

European Network of AI Excellence Centres (ELISE) Scholarship

Apr 2024

Award value: 5000 €.

Honorable Mention of Automated Knowledge Base Construction (AKBC) 2022

Nov 2022

• For the paper: Few-Shot Inductive Learning on Temporal Knowledge Graphs using Concept-Aware Information.

First Prize Scholarship for Outstanding Student of East China Normal University

Nov 2017

• Award value: 8000 ¥.

Community Service

• Serve as reviewer including ACL Rolling Review, ICLR 25, NeurIPS 23/24, ICML 23, TNNLS.

Professional Skills

- Proficient skills in Python, PyTorch, Huggingface, Unix/Linux, LaTeX.
- Extensive expertise in machine learning, generative AI, meta learning and data mining.
- Language skills: Chinese (Native), English (Full Professional), German (Limited Working).