

TINGFENG LUO

✉ tluo9@illinois.edu

Research Interests

- AI for Science (Drug Discovery/Chemistry/Biology/Healthcare)
- Science Communication, Interdisciplinary Communication

Education

University of Illinois Urbana-Champaign

Aug. 2021 – May. 2025 (expected)

B.S. in Computer Science

GPA: 3.89

- Deans List

Research Experience

University of Illinois Urbana-Champaign

Oct. 2024 – Present

Research Assistant, Language Interaction Lab

Champaign, IL

- Advisor: **Prof. Tal August**
- Investigated challenges in interdisciplinary communication within science domains
- Designed an interactive clinical document reading system with lay summaries for non-professionals

University of Illinois Urbana-Champaign

Nov. 2022 – Present

Research Assistant, Data Mining Group, Molecule Maker Lab Institute

Champaign, IL

- Advisor: **Prof. Jiawei Han**
- Led research of domain knowledge enhanced dense retrieval model for scientific literature
- Refined NSF renewal proposal to address real-world chemistry challenges
- Developed information extraction system for chemical reactions and procedures
- Established guidelines for evaluating information extraction performance on chemical tasks
- Bridged knowledge gap between group members and collaborators from chemistry department and NIH

Pfizer

Aug. 2020 – May. 2021

Research Assistant

Kalamazoo, MI

- Advisor: **Dr. Fu Liao**
- Investigated the inhibition of glucose on the growth of *Streptomyces spectabilis*
- Optimized spectinomycin yield from *Streptomyces spectabilis* via manipulation of media concentrations
- Achieved 300% increase in spectinomycin yield
- Granted USAID the Science for Development Award

Western Michigan University

Aug. 2019 – May. 2020

Research Assistant, Teske Lab

Kalamazoo, MI

- Advisor: **Prof. Kelly Teske**
- Investigated the gene regulation mechanism of miRNA-31
- Discovered a novel anti-cancer compound based on benzimidazole
- Synthesized novel phenylisoxazole sulfonamide analogues to inhibit miRNA-31 for the treatment of colorectal cancer

Publications

ActionIE: Action Extraction from Scientific Literature with Programming Languages

- Xianrui Zhong, Yufeng Du, Siru Ouyang, Ming Zhong, **Tingfeng Luo**, Qirong Ho, Hao Peng, Heng Ji, Jiawei Han
- ACL 2024

Reaction Miner: An Integrated System for Chemical Reaction Extraction from Textual Data

- Ming Zhong, Siru Ouyang, Yizhu Jiao, Priyanka Kargupta, **Leo Luo**, Yanzhen Shen, Bobby Zhou, Xianrui Zhong, Xuan Liu, Hongxiang Li, Jinfeng Xiao, Minhao Jiang, Vivian Hu, Xuan Wang, Heng Ji, Martin Burke, Huimin Zhao, Jiawei Han
- EMNLP 2023 Demo

Awards

USAID Science for Development Award, 2021

Skills

Programming Languages: C++, C, python, java, HTML

Languages: English, Chinese