

EDUCATION

- **University of Illinois Urbana-Champaign** **Master of Computer Science**
GPA: 4.00/4.00 *Aug 2022 - December 2023*
- **University of Illinois Urbana-Champaign** **Bachelor of Science, Computer Science and Chemistry**
GPA: 3.76/4.00 *Aug 2018 - May 2022*

RELATED COURSEWORK

- **Graduate-Level Courses:** Advanced NLP, Meta-Learning, Transfer Learning
- **Undergraduate-Level Courses:** Deep Learning, Bioinformatics, Text Information Systems, Inorganic Chemistry, Organic Chemistry, Physical Chemistry

PUBLICATIONS

- **From Text to Translation: Using Language Models to Prioritize Variants for Classification:**
Authors: Weijiang Li, Xiaomin Li, Ethan Lavalley, Alice Saparov, Marinka Zitnik, Christopher Cassa
In preparation
- **Assessing the Two-Sided Impact of Jailbreak on Autonomous Agents in Scientific Domain:**
Authors: Chenhui Zhang*, Weijiang Li*, Aswathy Ajith, Zinan Lin, Ian Foster, Dawn Song, Bo Li
In preparation and submitting to ICML 2025
- **LLMs as Email-Writers: A Comparison of Language in AI-Generated and Human-Written Emails:**
Authors: Weijiang Li, Yinmeng Lai, Sandeep Soni, Koustuv Saha
Submitted to WebSci 2025
- **Chemical-Reaction-Aware Molecule Representation Learning:**
Authors: Hongwei Wang, Weijiang Li, Xiaomeng Jin, Kyunghyun Cho, Heng Ji, Jiawei Han, Martin D. Burke
Published at The Tenth International Conference on Learning Representations (ICLR 2022)
- **Fine-Grained Chemical Entity Typing with Multimodal Knowledge Representation:**
Authors: Chenkai Sun, Weijiang Li, Jinfeng Xiao, Nikolaus Parulian, ChengXiang Zhai and Heng Ji
Published at IEEE International Conference on Bioinformatics and Biomedicine (BIBM 2021)
- **Towards out-of-distribution generalizable predictions of chemical kinetics properties:**
Authors: Zihao Wang, Yongqiang Chen, Yang Duan, Weijiang Li, Bo Han, James Cheng, and Hanghang Tong
Published at AI for Scientific Discovery: From Theory to Practice (NeurIPS 2023)

RESEARCH EXPERIENCE

- **Division of Genetics at Brigham and Women's Hospital, Harvard Medical School** **Boston, MA**
Research Assistant *Jun 2023 - Present*
 - **Reclassifying Genetic Variant Pathogenicity with Language Models:**
 - Extracted and processed metadata from the ClinVar database, built data cleaning and filtering methods and pipelines for ClinVar submission summary text data, and analyzed the corpus based on semantic features
 - Trained a sequence classifier for ClinVar submission summary data, evaluated and validated the model using clinical data, and conducted interpretability study on model predictions
 - **Extracting forms of evidence of pathogenicity from clinical text summaries:**
 - Processed ClinVar dataset with explicit ACMG evidence code mentions, and leveraged LLMs to do systematic annotation on the dataset, obtaining labeled dataset for evidence type classification models training
 - Using clinical data, such as functional score from deep mutational scanning data and population data, for validating our trained classification models
- **Blender Lab Directed by Professor Heng Ji** **Champaign, IL**
Research Assistant *Jan 2021 - Aug 2022*
 - **Chemical Representation Learning:**
 - Processed existing chemical reaction datasets using RDKit; adapted and implemented baseline evaluation pipeline using models such as MolBERT and Mol2Vec, and obtained results for both reaction prediction and property prediction tasks
 - **Fine-Grained Chemical Entity Typing:**
 - Constructed an organic chemical compound naming ontology, conducted chemistry literature annotation, and developed into the first open-sourced chemical entity typing evaluation dataset

TEACHING EXPERIENCE

- **University of Illinois Urbana-Champaign** Champaign, IL
Graduate Teaching Assistant Aug 2022 - Dec 2023
 - **CS 361, Probability & Statistics for Computer Science:** Fall 2022, Spring 2023, Fall 2023
 - Provided academic support to a large undergraduate class of over 350 students, by leading weekly recitation sessions to facilitate course content review, hosting office hours each week, and designing homework and exam questions and rubrics
 - **CS 421, Programming Languages & Compilers:** Summer 2023
 - Assisted 150 undergraduate and graduate students during the summer session through weekly office hours and exam/quiz question reviews.
- **University of Illinois Urbana-Champaign** Champaign, IL
Undergraduate Course Assistant Jan 2019 - May 2019
 - **CS 125, Intro to Computer Science, led by Professor Geoffrey Challen:**
 - Help with a class of 800+ undergraduate students on a programming course based on Java by helping students during weekly lab sections, hosting office hours and tutoring sessions, and answering questions on the class forum

PROFESSIONAL EXPERIENCE

- **COUNTRY Financial** Champaign, IL
Program Manager and Software Development Intern May 2022 - Aug 2022
 - **Infrastructure as Code:**
 - Headed the research and execution of an Infrastructure as Code initiative, leveraging Ansible and GitLab CI/CD pipelines, which resulted in the implementation of several automated infrastructure development features within the organization
 - Conducted weekly meetings with project mentors and organized frequent internal meetings to monitor project progress; utilized GitLab README to document notes and issues for future reference

LEADERSHIP EXPERIENCE

- **Built by Girls at UIUC** Champaign, IL
Corporate Chair Aug 2020 - May 2022
 - Collaborated with industry partners to design, coordinate, and deliver workshops and recruitment events for women in tech; organized an annual Project Summit featuring industry mentors to guide and mentor participants
- **Reflections | Projections** Champaign, IL
Content & Social Committee Staff Feb 2020 - May 2022
 - Arranged and hosted keynote talks and workshops for RP with speakers from industry and academia, and set up social events with partnered companies for students in the CS department and staff members during RP
- **Alpha Phi Omega, National Service Fraternity** Champaign, IL
Volunteer Service Project Coordinator, Leadership & Tech Committee Member Jan 2019 - Jan 2020
 - Coordinated 150+ students and staff members in the organization, managed 30+ weekly volunteering events throughout the semester for the ETC Coffee House Volunteer Program, and maintained service events and logistics

HONORS AND AWARDS

- Edmund J James Scholar 2019 - 2021
- Eunice S. Wu Memorial Scholarship from the Department of Chemistry 2018 - 2019, 2019 - 2020
- Life + Career Design Scholarship from the College of Liberal Arts & Sciences, Spring 2021

POSTERS AND TALKS

- Poster presentation at the AI Cures Conference 2024 hosted by MIT and MGB, April 2024
- GRIP Seminar at the Division of Genetics at Brigham and Women's Hospital, Harvard Medical School, May 2024

ACADEMIC SERVICE

- Reviewer for ACL 2024 Language + Molecule Workshop, EMNLP 2024 Demo Track, ICLR 2025, AAAI 2025 AI4Research Workshop