Xing Yi (Peter) Liu

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EDUCATION

Columbia University, New York, NY, United States   Feb 2023
M.S. in Computer Science, Machine Learning Track

University of California, Los Angeles, Los Angeles, CA, United States   Jun 2021
B.A.Sc. in Applied Mathematics (with Specialization in Computing) and Business Economics

POSITIONS HELD

Tsinghua University, Beijing, China
Research Intern, Institute for AI Industry Research   Mar 2023 – Aug 2023

Columbia University, New York, NY, United States
Head Teaching Assistant, COMS W3203, Discrete Mathematics, Prof. Tony Dear   Fall 2022
Teaching Assistant, COMS W4701, Artificial Intelligence, Prof. Tony Dear   Spring, Summer 2022

Bedrock Industries, Shanghai, China
Data Analyst Intern   Dec 2019

CITIC Securities, Beijing, China
Investment Banking Intern, Health Services Group   Aug 2018 – Sep 2018

PUBLICATIONS

[1] Yizhen Luo, Kai Yang, Massimo Hong, **Xing Yi Liu**, Zikun Nie, Hao Zhou, Zaiqing Nie. "Learning Multi-View Molecular Representations with Structured and Unstructured Knowledge." 30th ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), August 2024.

[2] Yizhen Luo, **Xing Yi Liu**, Kai Yang, Kui Huang, Massimo Hong, Jiahuan Zhang, Yushuai Wu, and Zaiqing Nie. "Toward Unified AI Drug Discovery with Multimodal Knowledge." Health Data Science, February 2024.

[3] **Xing Yi Liu** and Homayoon Beigi. "Efficient Ensemble for Multimodal Punctuation Restoration Using Time-Delay Neural Network." 18th International Conference on Ubiquitous Information Management and Communication (IMCOM), January 2024.

[4] Anqi Cui, Guangyu Feng, Borui Ye, Kun Xiong, **Xing Yi Liu**, and Ming Li. "UWNLP at the NTCIR-12 Short Text Conversation Task." Proceedings of the 12th NTCIR Conference on Evaluation of Information Access Technologies (NTCIR-12), June 2016.

OTHER RESEARCH

OpenBioMed   Aug 2023
Yizhen Luo, Kai Yang, Massimo Hong, **Xing Yi Liu**, Suyuan Zhao, Jiahuan Zhang, Yushuai Wu, and Zaiqing Nie
- Deep learning framework for biomedical research: https://github.com/PharMolix/OpenBioMed
- Supports 3 modalities for molecules, 10 downstream tasks, 20+ models, and 20+ datasets

Peptide Quantification   Jul 2022 – Mar 2023
Supervisor: Prof. Ming Li, University of Waterloo
- Determining relative abundance of specific peptides in biological samples using machine learning
- Aggregating varying peptide amounts detected in different replicates of the same dilution sample
- Adopting PointIso for peptide feature detection from liquid chromatography mass spectrometry maps

AWARDS

Andrew P. Kosoresow Memorial Award for Excellence in Teaching and Service   Apr 2023
Awarded at Columbia University for teaching assistantship, nominated by Prof. Tony Dear

SERVICE

President, UCLA Undergraduate Mathematics Students Association   Mar 2020 – Mar 2021