Tianxing Hu

Atlanta, GA 30329 | tianxinghu1213@gmail.com | LinkedIn | Google Scholar | Website | GitHub

RESEARCH INTERESTS

Foundation Models, Multi-modal Learning, Contrastive Learning, Statistical Modeling, Bioinformatics

EDUCATION

***Ph.D. in Computer Science and Informatics*, Emory University** — Atlanta, GA
Research Assistant — Sep 2026 - May 2031 (Expected)

***M.S. in Data Science*, New Jersey Institute of Technology** — Newark, NJ
Research and Teaching Assistant, GPA: 4.0, Rank 1/65 — Sep 2023 - May 2026

***B.S. in Applied Statistics*, Shanghai University of Finance and Economics** — Shanghai, China
Minor in Computer Science and Technology — Sep 2015 - Jul 2019

PUBLICATIONS

[1] Context-specific benchmarking of foundation models for gene network inference.
Tianxing Hu, Weiwei Wu, Zhaohui S. Qin, Chang Su.
Under review in the International Conference on Learning Representations 2027.

[2] Cross-tissue Graph Attention Networks for Semisupervised Gene Expression Prediction.
Shiyu Wang, **Tianxing Hu**, Mengyu He, Muran Qin, Yijuan Hu, Liang Zhao, Zhaohui Qin.
Briefings in Bioinformatics (2026). [Link]

[3] Transformers for Single-Cell Sequencing: A Survey.
Tianxing Hu, Zhi Wei.
Briefings in Bioinformatics (2026). [Link]

[4] GeneMamba: An efficient and effective single-cell language model.
Cong Qi, Hanzhang Fang, Siqi Jiang, Xun Song, **Tianxing Hu**, Zhi Wei
IJCNN (2026). [Link]

[5] LANTERN: TCR–peptide binding prediction via large language model representations.
Cong Qi, Hanzhang Fang, Siqi Jiang, **Tianxing Hu**, Zhi Wei
PeerJ (2026). [Link]

[6] Clonal dynamics shaped by diverse drug-tolerant persister states in melanoma resistance.
Li, H, et al. (including **Tianxing Hu**).
Molecular Cancer (2026). [Link]

**Equal contribution (co-first authors).*

PROFESSIONAL SERVICES

Peer reviews: Bioinformatics, Bioinformatics Advances, Nucleic Acids Research, Briefings in Bioinformatics, Transactions on Machine Learning Research, IEEE Transactions on Systems, Man, and Cybernetics: Systems, Statistical Applications in Genetics and Molecular Biology

TEACHING ASSISTANT

CS732 Advanced Machine Learning (NJIT)

CS337 Performance Modeling in Computing (NJIT)

CS114 Intro To Computer Science II (NJIT)

CS482 Data Mining (NJIT)

FULL-TIME WORK EXPERIENCE

Data Analyst, East Money Information Co., Ltd, Shanghai, China Jan 2021 - Jun 2022

Engineered large-scale financial data pipelines using Python and SQL, processing millions of records while optimizing system performance and reliability. Led cross-functional system upgrades for U.S. and Hong Kong equity fundamentals platforms, designing business logic and dashboards to improve data accessibility and operational efficiency.

TECHNICAL SKILLS

Languages: Python (NLTK, spaCy, PyTorch, Pandas, Sklearn), SQL, R, Java, C++, Linux, SAS, LaTeX, HPC

AI tool skills: Agentic AI, MCP, multi-agent systems, RAG, Function calling, LLM integration, workflow automation, AI-assisted research / coding, LangChain, LLM prompting, Hugging Face

Coursework: Multivariate Statistical Analysis, Time Series Analysis, Stochastic Processes, Natural Language Processing, Data Mining, Data Structures and Algorithms, Deep Learning, Advanced Machine Learning.

Certificate: Chartered Financial Analyst, Level I.