Ziao Yang

Michtom School of Computer Science
Volen Center for Complex Systems 109
Brandeis University, 415 South St, Waltham, MA 02453

+1 (781)-392-8208
ziaoyang@brandeis.edu
https://yangziao56.github.io/homepage/

EDUCATION		
Brandeis University		Waltham, MA, USA
Ph.D. Candidate in Computer Science		09/2023 - now
Advisor: Professor Hongfu Liu		
Sun Yat-Sen University		Guangzhou, China
B.Eng. in Computer Science and Technology		09/2018 - 06/2022

RESEARCH INTERESTS

- **Data Centric Learning:** Detrimental Sample Identification, Sample Curation for Foundation Models, Data-Efficiency Training
- **Large Language Model:** Sample Curation for Pre-Training and Post-Training, Reinforcement Learning, LLM as Judge

INDUSTRY EXPERIENCE

- **Adobe** San Jose, California
  Machine Learning Egineer Intern, *Mentor*: Dr. Lei Zhang 05/2025 - 08/2025
  Developed a multi-persona catchphrases generation system for brands (e.g., Coca-cola, Photoshop, Acrobat); designed structured prompts and a multi-pass pipeline that improved offline quality (LLM-as-judge + rule-based checks). Trained a reward model and applied PPO to optimize toward brand style.
- **Y Combinator China** Beijing, China
  Personal Assistant, *Mentor*: Dr. Qi Lu 03/2023 - 07/2023
  Crafted strategic presentations and financing materials for Dr. Qi Lu, e.g., "My Foundation Model Worldview."
  Led industry research and liaised with leading scientists from Microsoft Research, Meta, Nvidia Research, IDEA Research, and Shanghai AI Lab.
- **International Digital Economy Academy (IDEA)** Shenzhen, China
  Research Intern, *Mentor*: Dr. Jiaxing Zhang 03/2022 - 07/2022
  Constructed Supervised pre-training datasets (27million) for multi-classification tasks using existing datasets and performed sub-task sampling.
  Performed supervised pre-training on BERT using Meta-Learning algorithms (e.g., MAML, Reptile) to enlighten it with prior classification knowledge.

PUBLICATIONS

1. **Ziao Yang**, Longbo Huang, and Hongfu Liu. "Layer-Aware Influence for Online Data Valuation Estimation." *arXiv preprint* arXiv:2510.16007, 2025.
2. **Ziao Yang**, Han Yue, Jian Chen, and Hongfu Liu. "Revisit, Extend, and Enhance Hessian-Free Influence Functions." *arXiv preprint* arXiv:2405.17490, 2024.
3. **Ziao Yang**, Han Yue, Jian Chen, and Hongfu Liu. "On the Inflation of KNN-Shapley Value." *arXiv preprint* arXiv:2405.17489, 2024.
4. **Ziao Yang**, Xiangrui Yang, and Qifeng Lin. "TCTN: A 3D-Temporal Convolutional Transformer Network for Spatiotemporal Predictive Learning."
   arXiv preprint arXiv:2112.01085, 2021.
5. **Ziao Yang**, Xiangrui Yang, and Qifeng Lin. "PTCT: Patches with 3D-Temporal Convolutional Transformer Network for Precipitation Nowcasting." *arXiv preprint* arXiv:2112.01085, 2021.

HONORS & AWARDS

- Tianchi Big Data Competition - AI Helps Weather Forecast (Top 1%) 2022
  Alibaba Group
- National Level of College Student Innovation Competition (Top 1) 2022
  Sun Yat-Sen University
- TCTN Official Implementation with 100+ stars on GitHub 2022 - now

PROFESSIONAL ACTIVITIES

- **Reviewer**
  - ◇ Neural Information Processing Systems (**NeurIPS**) 2023 - now
  - ◇ International Conference on Learning Representations (**ICLR**) 2024 - now