

Dongbai Li

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RESEARCH INTERESTS

Trustworthy AI, OOD generalization, Domain generalization, Stable learning

EDUCATION

Tsinghua University, Beijing, China
Department of Computer Science and Technology

9 2022 — Present
Cumulative GPA: 3.87

RESEARCH EXPERIENCE

Prof. Peng Cui's lab

Research intern

Department of Computer Science and Technology
3 2023 — Present

- **Domain Generalization**

From a data-centric perspective, we addressed a practical requirement of acquiring training samples from various domains on a limited budget to facilitate model generalization to target domain with distribution shift. To handle this, we introduced a Domain-wise Active Acquiring framework which iteratively optimizes the data acquisition strategy. I contributed some ideas and conducted all the experiments in this work.

- **Stable Learning**

Enhanced the sample-reweighting approach in stable learning by incorporating a loss function to emphasize the training of challenging samples. I took charge of translating the conceptual framework into executable code, alongside curating datasets and crafting graphical representations.

PUBLICATIONS

- Yue He, **Dongbai Li** (co-first authors), Pengfei Tian, Han Yu, Jiashuo Liu, Hao Zou, Peng Cui. Domain-wise Data Acquisition to Improve Performance under Distribution Shift. **ICML 2024**.
- Han Yu, Yue He, Renzhe Xu, **Dongbai Li**, Jiayin Zhang, Wenchao Zou, Peng Cui. Sample Weight Averaging for Stable Prediction. **Under review**.

SKILLS

- **Programming:** C++, Python
- **Machine learning:** principles, model utilization, data processing and analysis
- **Deep learning:** Pytorch

SELECTED COURSES

- Fundamentals of Programming(C++) A
- Programming and Training(Python) A
- Probability and Statistics A
- Discrete Mathematics for Computer Science A-

REFERENCES

Prof. Peng Cui

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Scholar Profiles: Personal Page — Google Scholar