Computer Science and Engineering Department   Mobile: (+1)-517-721-0877
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RESEARCH FOCUS

Deep Learning: Adversarial Machine Learning, Deep Model Compression, Computer Vision

EDUCATION

Ph.D. in CSE, Michigan State University   Advisor: Sijia Liu   Aug. 2022 – Now

B.Eng. in Automation, Tsinghua University   Rank: Top 20%   Aug. 2018 – July. 2022

WORKING EXPERIENCE

Research Intern in Tsinghua Statistical Artificial Intelligence & Learning Group, Beijing

Supervisor: Jun Zhu   June. 2021 – Dec. 2021

PUBLICATION

[1] **A. Chen**, Y. Yao, P. Chen, Y. Zhang, S. Liu, Understanding and Improving Visual Prompting: A Label-Mapping Perspective, *CVPR'2023 submitted*.

[2] **A. Chen**, P. Lorenz, Y. Yao, P. Chen, S. Liu, Visual Prompting for Adversarial Robustness, *NeurIPS'22 ML Safety Workshop*.

PROJECT

Advancing Visual Prompt Technique

Supervisor: Sijia Liu (MSU) Collaborator: Pin-Yu Chen (IBM)

- Devise a novel iterative label mapping method for visual prompting which brings significant accuracy and interpretability improvements.
- Leverage visual prompting to improve test-time robustness.
- Explore connections between class-wise prompts and backdoor attack.
- **Publication**: [1, 2]

Uncertainty Calibration for Image Classification

Supervisor: Jun Zhu (Tsinghua) Collaborator: Zhijie Deng (Tsinghua)

- Leverage model-based bayesian learning to improve calibration.
- Leverage augmentation-based methods to improve calibration.

SKILL

- Excellent in Python, PyTorch for over 3 years; Familiar with C++, Git, Shell

HONOR

- **Entrepreneurship Excellence Award** by Qingshan Capital, 2021.
- **Academic Excellence Scholarship** of Tsinghua University, 2019.
- **Chinese University Entrance Exam Rank 0.01%** of Sichuan Province, 2018.
- **Chinese Chemistry Olympics 1st Prize** of Sichuan Province, 2017.

SERVICE

- **Reviewers** of ICML'22, KDD'22, ICASSP'22.