# Bingqi Shang

🌐 [Website](#) | 🎓 [Google Scholar](#) | ⊙ [GitHub](#) | ✉ shangbin@egr.msu.edu | 📞 (872) 304-8591

## RESEARCH INTERESTS

**Trustworthy Machine Learning:** Machine Unlearning, Alignment & RLHF, Adversarial Machine Learning, Privacy

## EDUCATION

| | |
|---|---|
| **Michigan State University (MSU)** | Aug. 2025 - Present |
| Incoming Ph.D. Student, Computer Science | Advisor: Prof. Sijia Liu |
| **Northwestern University (NU)** | Sep. 2023 - Jun. 2025 (expected) |
| M.S., Computer Science | Advisors: Prof. Qi Zhu and Prof. Xiao Wang |
| **Tongji University** | Sep. 2019 - Jun. 2023 |
| B.E., Software Engineering | School of Computer Science and Technology |

## RESEARCH EXPERIENCE

**On the Adversarial Implications of Attention Sinks in LLMs**      Apr. 2025 - Present
Supervisor: Prof. Sijia Liu (MSU)

- Investigating attention sinks in LLMs to develop more effective backdoor poisoning attacks.
- Exploring applications in unlearned models where backdoor triggers can selectively recover forgotten knowledge.

**Privacy-Preserving Tuning for Large Models**      Dec. 2023 - Mar. 2025
Supervisors: Prof. Qi Zhu (NU), Prof. Xiao Wang (NU)

- Developed Split Adaptation (SA) to ensure **data privacy** during adaptation of pre-trained Vision Transformers (ViTs), utilizing bi-level noise injection for privacy-preserving downstream tasks without data sharing.
- Protected **model privacy** by sharing only a low-bit quantized frontend of the ViT, preventing model leakage and ensuring secure adaptation.
- **Publication**: [1]

## PROFESSIONAL EXPERIENCE

**Cloud Native Computing Foundation** *Remote*      Mar. 2023 - May 2023
Software Engineer Intern, Supervisor: Patrick Zheng
Project: KMS plugin for Notation CLI using Go.

**SAP** *Shanghai, China*      Jun. 2022 - Mar. 2023
Cloud Developer Intern, Supervisor: April Qi
Project: Cloud Provider Exporter in Go on Kubernetes for AWS, Azure, and GCP, using Prometheus and Grafana.

## PUBLICATIONS

**\* indicates an equal contribution**

[1] Lixu Wang*, **Bingqi Shang**\*, Yi Li, Payal Mohapatra, Wei Dong, Xiao Wang, Qi Zhu. **Split Adaptation for Pretrained Vision Transformers**. *CVPR'2025*.

## HONORS

- Shanghai Outstanding Graduate Award      2023
- Outstanding Undergraduate Dissertation Award of Tongji University      2023
- **National Scholarship** (Top 0.2%, highest undergraduate honor in China)      2020

## PERSONAL INTERESTS

**Astrophotography**      2019 - Present

# PROFESSIONAL SKILLS

**Programming Languages**: Python, Go, C++, Java, Rust, JavaScript, Latex, HTML, CSS
**Machine Learning Systems**: PyTorch, Transformers, W&B, OpenCV, Scikit-learn

Last updated: April 15, 2025.