BINGYIN ZHAO

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ABOUT ME

▷ 7+ years AI researcher and engineer with first-author papers in CVPR, ICCV, AAAI
▷ Proficient coding in Python and PyTorch, familiar with Numpy, Scikit-learn, Pandas, Docker, Git, LaTeX
▷ Experience designing and training neural networks in fast-paced teams
▷ Solid knowledge in Generative AI, Trustworthy AI, Computer Vision and Deep Learning
▷ Research interests in AIGC, AI for Science, Foundation Models, and AI safety

EXPERIENCE

Pixocial
Singapore
Applied Scientist — Jun. 2025 — Now
- Product development and research on image/video generation/editing.

National University of Singapore
Singapore
Research Fellow — Oct. 2024 — Jun. 2025
- Research on AIGC, LLM, diffusion models and fractal generative models.
- Supervise Ph.D. students for research on the privacy and security of generative models.
- Design and implement the first generation conditional time-series tabular generative model for Betterdata.

NVIDIA
Santa Clara, CA, USA
Deep Learning Software and Research Intern (AV Perception) — May. 2022 — Feb. 2023
- Conduct research on zero-shot robustness of ViT-based neural networks against natural corruptions such as weather conditions and natural adversarial examples.
- Published an ICCV paper and filed one US patent.
- **Received a full-time offer as a Senior Systems Software Engineer but could not return to the US due to an unexpected visa issue.**

Clemson University
Clemson, SC, USA
Research Assistant — Jan. 2018 — May. 2024
- Research on trustworthy AI, particularly poisoning attacks, backdoor attacks and corresponding countermeasures.
- Published papers at AAAI, WACV, TCAD, DAC, etc.

EDUCATION

CLEMSON UNIVERSITY
Clemson, SC, USA
Ph.D. in ELECTRICAL AND COMPUTER ENGINEERING — GPA: 4.0

ROCHESTER INSTITUTE OF TECHNOLOGY
Rochester, NY, USA
Master of Science in ELECTRICAL ENGINEERING

EAST CHINA UNIVERSITY OF SCIENCE AND TECHNOLOGY
Shanghai, China
Bachelor of Science in ELECTRICAL ENGINEERING

SELECTED PUBLICATIONS

Y. Han*, **B. Zhao*,** *R. Chu, F. Luo, B. Sikdar and Y. Lao,* **UIBDiffusion: Universal Imperceptible Backdoor Attack for Diffusion Models**
2025 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR) *(Selected as highlight = 3%)*

B. Zhao*, Z. Yu, S. Lan, Y. Cheng, A. Anandkumar, Y. Lao and J. Alvarez,* **Fully Attentional Networks with Self-emerging Token Labeling**
2023 IEEE/CVF International Conference on Computer Vision (ICCV)

B. Zhao *and Y. Lao,* **CLPA: Clean-Label Poisoning Availability Attacks Using Generative Adversarial Nets**
Thirty-Sixth AAAI Conference on Artificial Intelligence (AAAI) *(Acceptance Rate = 15%)*

B. Zhao*, L. Qiu and Y. Lao,* **Data-Driven Feature Selection Framework for Approximate Circuit Design**
IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD)

A.Wang, **B. Zhao** *and Y. Lao,* **Neural Network Fault Attacks Detection Using Gradient-Based Test Vector Generation**
60th ACM/IEEE Design Automation Conference (DAC)

PATENT

B. Zhao*, J. Alvarez, A. Anandkumar, S. Lan, Z. Yu,* **Fully Attentional Networks with Self-emerging Token Labeling**
US Patent App. 18/542,423