# **BINGYIN ZHAO**

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## **ABOUT ME**

- > 7+ years AI researcher and engineer with first-author papers in CVPR, ICCV, AAAI
- De Proficient coding in Python and PyTorch, familiar with Numpy, Scikit-learn, Pandas, Docker, Git, MFX
- > 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

Deep Learning Software and Research Intern (AV Perception)

Santa Clara, CA, USA 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

Rochester, NY, USA

GPA: 4.0

#### **ROCHESTER INSTITUTE OF TECHNOLOGY**

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)
- B. Zhao and Y. Lao, Towards Class-Oriented Poisoning Attacks Against Neural Networks 2022 IEEE Winter Conference on Applications of Computer Vision (WACV)

## **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