REN PANG

A. Research Interests

Deep Learning Security: Adversarial Robustness; Neural Backdoors

AutoML: Neural Architecture Search; Auto Augment

Others: Lifelong Learning; Dataset Condensation

B. Education Background

Ph.D., Information Sciences and Technology, Pennsylvania State University

2019-present

Ph.D., Computer Science and Engineering, Lehigh University (transferred)

2018-2019

BSc., Mathematics, Nankai University

2014-2018

C. Publications

 TrojanZoo: Towards Unified, Holistic, and Practical Evaluation of Neural Backdoors, R. Pang, Z. Zhang, X. Gao, Z. Xi, S. Ji, P. Cheng, and T. Wang,

Proceedings of the IEEE European Symposium on Security and Privacy (EuroS&P), 2022.

2. On the Security Risks of AutoML,

R. Pang, Z. Xi, S. Ji, X. Luo, and T. Wang,

 $Proceedings \ of \ the \ USENIX \ Security \ Symposium \ (SECURITY), 2022.$

3. Graph Backdoor,

Z. Xi, R. Pang, S. Ji, and T. Wang,

Proceedings of the USENIX Security Symposium (SECURITY), 2021.

4. i-Algebra: Towards Interactive Interpretability of Deep Neural Networks,

X. Zhang, R. Pang, S. Ji, F. Ma, and T. Wang,

 $Proceedings \ of \ the \ AAAI \ Conference \ on \ Artificial \ Intelligence \ (AAAI), 2021.$

5. AdvMind: Inferring Adversary Intent of Black-Box Attacks,

R. Pang, X. Zhang, S. Ji, X. Luo, and T. Wang,

Proceedings of the ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD), 2020.

6. A Tale of Evil Twins: Adversarial Inputs versus Poisoned Models,

R. Pang, H. Shen, X. Zhang, S. Ji, Y. Vorobeychik, X. Luo, A. Liu, and T. Wang,

Proceedings of the ACM Conference on Computer and Communications Security (CCS), 2020.

D. Open-Sourced Projects

Owner

AlpsPlot

https://github.com/ain-soph/alpsplot

TrojanZoo: Towards Unified, Holistic, and Practical Evaluation of Neural Backdoors

https://github.com/ain-soph/trojanzoo

TrojanZoo Sphinx Theme

https://github.com/ain-soph/trojanzoo_sphinx_theme

Contributor

 $matplotlib; pytorch_sphinx_theme; sphinxcontrib-katex; torchvision$

E. Teaching Assistant Experiences

CYBER 497: Machine Learning Security (Penn State), 2020 Spring

CSE 017: Structured Programming and Data Structures (Lehigh), 2018 Fall

F. Technical Skills

Language

Python; Java; C++; MatLab; Bash; LaTeX; HTML; JavaScript

Package

pytorch; matplotlib; sphinx; jinja; pytest

Tools

Auto CI; Docker; GitHub Actions