Qiuling Xu

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I am a 4th-year PhD student. I am looking for research opportunities regarding CV/NLP/ML and their practical applications. I am experienced with hands-on deep learning, math proof, and programming. I am particularly experienced in adversarial learning. I am open to all interesting opportunities.

Education

Purdue University
*PhD in **Computer Science**, West Lafayette, Indiana, USA* *Aug. 2018 – May 2023 (expected)*

Nanjing University
*BS in **Computer Science**, Nanjing, Jiangsu, China* *Aug. 2014 – May 2018*

Experience

Adobe, *Research Intern, California* *May. 2021 – Aug 2021*
- Improve the **Consistency Learning** in model development.

Microsoft Research, *Research Intern, Beijing* *Mar. 2018 – June 2018*
- Designed hyper-parameter searching space representation for ***user-friendly automatic machine learning***.

Purdue University, *Research Assistant, Indiana* *Aug. 2018 – Present*
- Studied methods for defense, explanation, and analysis of adversarial attack in ***adversarial learning***.

Nanjing University, *Research Assistant, China* *Aug. 2016 – June 2018*
- Devised an end-to-end module to learn **logical reasoning** and **neural perception** simultaneously.

Awards

Top 1% in ACM-ICPC International Programming Contest China ***Final*** (16/1500) *2016, Shanghai, China*

Publications (* represents equal contribution)

Backdoor Scanning for Deep Neural Networks through K-Arm Optimization
*Guangyu, Yinqi, Guanhong, Shengwei, **Qiuling** and Xiangyu* **ICML 2021**

A Le Cam Type Bound for Adversarial Learning and Applications
Qiuling*, *Kevin* and Jean* **ISIT 2021**

Towards Feature Space Adversarial Attack by Style Perturbation
***Qiuling**, Guanhong, Siyuan and Xiangyu* **AAAI 2021**

Trace Divergence Analysis and Embedding Regulation for Debugging Recurrent Neural Networks
*Guanhong, Shiqing, Yingqi, **Qiuling** and Xiangyu* **ICSE 2020**

Bridging Machine Learning and Logical Reasoning by Abductive Learning
WangZhou, **Qiuling***, Yang* and Zhihua* **NeurIPS 2019**

Deep Distribution Bound for Nature-looking Adversarial Attack
***Qiuling**, Guanhong and Xiangyu* Preprint

Reducing Accuracy Gap in Adversarial Training by Discriminating Adversarial Samples
***Qiuling**, Guanhong, Shengwei, Jean and Xiangyu* Preprint

Technical Skills

Experience: Reinforcement Learning, Optimization, Learning Theory, System, Programming Language, Algorithm, Computer Vision, Natural Language Processing
Languages: Python, C, C++, SQL **Frameworks**: Tensorflow, Pytorch