

# Qianli Shen

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✉ [shenqianli@u.nus.edu](mailto:shenqianli@u.nus.edu) 📞 +86.17801002949 🌐 <https://shenqianli.github.io>  
📍 COM3-02-21, 11 Research Link, Singapore 119391

## 🎓 Education

**Peking University, China** July 2020  
**Bachelor of Science(B.S.) in Computer Science**

**National University of Singapore, Singapore** Aug.2021 - present  
**Doctor of Philosophy(Ph.D.) in Computer Science**

## 🏛️ Academic Experience

**Undergraduate Researcher** at Center for Data Science, Peking University Aug. 2018 – July 2020  
Advisor: [Prof. Zhanxing Zhu](#)

**Research Intern** at Flash Lab, School of ISyE, Georgia Tech July 2019 - Oct. 2019  
Advisor: [Prof. Tuo Zhao](#)

## 📄 Publications

**Memory-Efficient Gradient Unrolling for Large-Scale Bi-level Optimization**  
Qianli Shen, Yezhen Wang, Zhouhao Yang, Xiang Li, Haonan Wang, Yang Zhang, Jonathon Scarlett, Zhanxing Zhu, Kenji Kawaguchi  
*Preprint, 2024*

**The Stronger the Diffusion Model, the Easier the Backdoor: Data Poisoning to Induce Copyright Breaches Without Adjusting Finetuning Pipeline**  
Haonan Wang, Qianli Shen, Yao Tong, Yang Zhang, Kenji Kawaguchi  
*BUGS Workshop @ In Advances in Neural Information Processing Systems (NeurIPS), 2023 (Oral)*  
*International Conference on Machine Learning (ICML), 2024*

**VA3: Virtually Assured Amplification Attack on Probabilistic Copyright Protection for Text-to-Image Generative Models**  
Xiang Li\*, Qianli Shen\*, Kenji Kawaguchi  
*The IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024*

**PICProp: Physics-Informed Confidence Propagation for Uncertainty Quantification**  
Qianli Shen, Wai Hoh Tang, Zhun Deng, Apostolos Psaros, Kenji Kawaguchi  
*In Advances in Neural Information Processing Systems (NeurIPS), 2023*

**GFlowOut: Dropout with Generative Flow Networks**  
Dianbo Liu, Moksh Jain, Bonaventure F. P. Dossou, Qianli Shen, Salem Lahlou, Anirudh Goyal, Nikolay Malkin, Chris Chinenye Emezue, Dinghuai Zhang, Nadhir Hassen, Xu Ji, Kenji Kawaguchi, Yoshua Bengio  
*International Conference on Machine Learning (ICML), 2023*

**Deep Reinforcement Learning with Robust and Smooth Policy**  
Qianli Shen\*, Yan Li\*, Haoming Jiang, Zhaoran Wang, Tuo Zhao  
*International Conference on Machine Learning (ICML), 2020*

## 🔧 Softwares

**PRIMAL: A Linear Programming-based Sparse Learning Library in R and Python**  
Qianli Shen\*, Zichong Li\*, Yujia Xie, Tuo Zhao

## 👤 Teaching

**CS6216 - Advanced Topics in Machine Learning, 2022 Fall, TA**