Xiaoting Li

Education

Sep 2017-Mar 2022 Pennsylvania State University, United States,

College of Information Sciences and Technology,

Ph.D. degree advised by Dr. Dinghao Wu.

Ecole Polytechnique Fédérale de Lausanne (EPFL), Switzerland, Feb 2019-Jul 2019

School of Computer and Communication Sciences,

Visiting PhD student at Very Large Scale Computing Lab.

Sep 2016-Feb 2017 University of Strathclyde, United Kingdom,

Department of Computer Science,

Visiting student advised by Dr. John Levine.

B.E. University of Electronic Science & Technology of China, Sep 2013-Jul 2017

Dept. of Computer Science and Technology, major in Information Security,

Advised by Dr. Hong Qu. Thesis: Robustness Improvement on Spiking Neural Network,

GPA: 3.88/4.0.

Work Experience

May 2021-Aug 2021 Visa Research, Research Intern, Active Graph Learning.

Proposing a new query method method to incorporate active learning to graphs to mitigate the label

scarcity challenge.

May 2020-Aug 2020 ByteDance Inc. Research Intern. Statically Analyzing critical C++ projects.

> Investigating a couple of static analysis tools including CppCheck, Flawfinder, etc., on C++ projects. We use Clang Static Analyzer to adapt to company's unique compile framework and develop customized checkers to meet specific detection requirements and to reduce false positives in code testing.

Publication

CIKM 2022 Xiaoting Li, Yuhang Wu, Vineeth Rakesh, Yusan Lin, Hao Yang, Fei Wang, SMARTQUERY:

An Active Learning Framework for Graph Neural Networks through Hybrid Uncertainty Reduction. In Proceedings of 31th ACM International Conference on Information and Knowledge

Management.

RecSys 2022 Huiyuan Chen, Xiaoting Li, Kaixiong Zhou, Xia Hu, Chin-Chia Michael Yeh, Yan Zheng, Hao

> Yang, TinyKG: Memory-Efficient Training Framework for Knowledge Graph Neural Recommender Systems. In Proceedings of 16th ACM Conference on Recommender Systems.

RecSys 2022 Huiyuan Chen, Yusan Lin, Menghai Pan, Lan Wang, Chin-Chia Michael Yeh, Xiaoting Li,

Yan Zheng, Fei Wang, Hao Yang, Denoising Self-Attentive Sequential Recommendation. In

Proceedings of 16th ACM Conference on Recommender Systems.

SecureComm 2022 Xiaoting Li, Lingwei Chen, Dinghao Wu, Adversary for Social Good: Leveraging Attribute-

Obfuscating Attack to Protect User Privacy on Social Networks. In Proceedings of 18th EAI International Conference on Security and Privacy in Communication Networks.

Xiaoting Li, Xiao Liu, Lingwei Chen, Rupesh Prajapati, Dinghao Wu, FuzzBoost: Reinforce-

ment Compiler Fuzzing. In Proceedings of 24th International Conference on Information and Communications Security.

ICICS 2022

SIGIR 2022 Quan Li, Xiaoting Li, Lingwei Chen, Dinghao Wu, Distilling Knowledge on Text Graph for

Social Media Attribute Inference. In Proceedings of International ACM SIGIR Conference on

Research and Development in Information Retrieval.

SDM 2022 Lingwei Chen, Xiaoting Li, Dinghao Wu, Adversarially Reprogramming Pretrained Neural

Networks for Data-limited and Cost-efficient Malware Detection. In Proceedings of SIAM

International Conference on Data Mining.

IAAI 2022 Xiaoting Li, Xiao Liu, Lingwei Chen, Rupesh Prajapati, Dinghao Wu, AlphaProg: Reinforce-

ment Generation of Valid Programs for Compiler Fuzzing. In Proceedings of 34th Annual

Conference on Innovative Applications of Artificial Intelligence.

IJCNN 2021 **Xiaoting Li,** Lingwei Chen, Jinquan Zhang, James Larus, Dinghao Wu, Watermarking-based Defense against Adversarial Attacks on Deep Neural Networks. *In Proceedings of International Joint Conference on Neural Networks*.

ICSE 2021 Qinkun Bao, Zihao Wang, **Xiaoting Li**, James Larus, Dinghao Wu, Abacus: Precise Side-Channel Analysis. *In Proceedings of 43rd International Conference on Software Engineering.*

SDM 2020 **Xiaoting Li,** Lingwei Chen, Dinghao Wu, Turning Attacks into Protection: Social Media Privacy Protection Using Adversarial Attacks. *In Proceedings of SIAM International Conference on Data Mining.*

ECML-PKDD 2020 Lingwei Chen, **Xiaoting Li**, Dinghao Wu, Enhancing Robustness of Graph Convolutional Networks via Dropping Graph Connections. *In Proceedings of European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases*.

AAAI 2019 Xiao Liu, **Xiaoting Li**, Rupesh Prajapati, Dinghao Wu, DeepFuzz: Automatic Generation of Syntactically Correct C Programs for Fuzz Testing. *In Proceedings of 33th AAAI Conference on Artificial Intelligence*.

Other Experience

PC Reviewer BigData'23, AAAI'23, ICDM'22, ECML-PKDD'20,'21,'22

External Reviewer KDD'21, ICDM'21, ICSE'21, CCS'19

Teaching Assistant PSU IST336: Cyber Security in Windows Malware analysis

Teaching Assistant PSU IST140: Application Development in Java

Selected Honors and Awards

Feb 2022 AAAI Conference Student Travel Grant Award. Jul 2021 Grace Hopper Conference (GHC) Scholarship. Apr 2020 Women in Cyber Security (WiCyS) Scholarship. Jan 2019 AAAI Conference Student Travel Grant Award. Apr 2018 Women in Cyber Security (WiCyS) Scholarship. Sept 2016 National Scholarship for Outstanding Undergraduates. Apr 2016 Honorable Mention in 2016 Mathematical Contest in Modeling. Sept 2015 Provincial Second Prize in National Mathematical Contest in Modeling. May 2015 Award of Excellence in National Mathematical Modeling Contest.

Computer Skills

Language Python, Scala, Java, Shell, C, R, Matlab, SML Substantial skill Keras, Tensorflow, PyTorch, Vim, Linux