

Xiling Li

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RESEARCH INTERESTS	Verifiable Query Evaluation, Privacy-Preserving Machine Learning, Secure Multiparty Computation, Zero Knowledge Proofs	
EDUCATION	Ph.D. Computer Science , Northwestern University	Sep 2021 - Present
	• Advisor: Dr. Jennie Rogers	
	M.S. Computer Science , University of Washington	Dec 2020
	• Advisor: Dr. Martine De Cock • Thesis: <i>Privacy-Preserving Filter-based Feature Selection with Secure Multiparty Computation</i>	
	B.S. Computer Science , University of California, San Diego	Dec 2016
RESEARCH EXPERIENCE	Research Assistant , Northwestern University @Database Group	Jun 2021 - Present
	• Proposed the first work on verifiable and efficient query evaluation with zero knowledge proofs for ad-hoc SQL queries in an operator-at-a-time fashion (One paper accepted by VLDB 2023)	
	Research Assistant , University of Washington @PPML Group	Sep 2019 - May 2021
	• Proposed Mean-Split Gini Impurity algorithm (MS-GINI) [2] for Filter-based Feature Selection (FFS) • Proposed the first general cryptographic protocol [1] for FFS based on honest majority secure multiparty computation with active security, and instantiated feature scoring protocol based on MS-GINI	
INDUSTRIAL EXPERIENCE	Data Scientist , IBM @Watson IoT	Jan 2018 - Aug 2019
	• Implemented a case-based reasoning system for disaster prevention based on knowledge graph	
	• Implemented a defective product detection vision system based on object detection of different crucial parts of product and defective classification according to partial detection of the product	
	• Implemented a real-time multi-face recognition system for storage monitoring	
	Android Developer , Shenzhen Das Intellitech Co.,Ltd @R&D Department	Jul 2017 - Dec 2017
SELECTED PUBLICATIONS	[1] Xiling Li and Rafael Dowsley and Martine De Cock. <i>Privacy-Preserving Feature Selection with Secure Multiparty Computation</i> , In Proceedings of the 38th International Conference on Machine Learning, PMLR 139:6326-6336, 2021.	
	[2] Xiling Li and Martine De Cock. <i>Cognitive load detection from wrist-band sensors</i> . In Adjunct Proceedings of the 2020 ACM International Joint Conference on Pervasive and Ubiquitous Computing and Proceedings of the 2020 ACM International Symposium on Wearable Computers (UbiComp-ISWC '20). ACM, New York, NY, USA, 456–461. DOI: https://doi.org/10.1145/3410530.3414428	
TEACHING	Teaching Assistant , COMP_SCI 339: Intro to Database Systems, Northwestern University, Spring 2023	
SERVICES	Reviewer : ICML 2021, 2022, 2023; NeurIPS 2021, 2022, 2023; ICLR 2022, 2023	
INVITED TALKS	Privacy + Machine Learning , Northwestern AI Journal Club, Nov 2021.	
TECHNICAL SKILLS	C++, Python, Java, EMP-toolkit, Scikit-Learn, PyTorch, MP-SPDZ, AWS EC2, Ubuntu, Docker	