

# Xiling Li

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Personal Website: <https://xilinggrantli.github.io>   Google Scholar   DBLP

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RESEARCH INTERESTS	Verifiable Query Evaluation, Privacy-Preserving Machine Learning, Secure Multiparty Computation, Zero Knowledge Proofs
EDUCATION	<p><b>Ph.D. Computer Science</b>, Northwestern University <span style="float: right;">Sep 2021 - Present</span></p> <ul style="list-style-type: none"><li>• Advisor: <a href="#">Dr. Jennie Rogers</a></li></ul> <p><b>M.S. Computer Science</b>, University of Washington <span style="float: right;">Dec 2020</span></p> <ul style="list-style-type: none"><li>• Advisor: <a href="#">Dr. Martine De Cock</a></li><li>• Thesis: <i>Privacy-Preserving Filter-based Feature Selection with Secure Multiparty Computation</i></li></ul> <p><b>B.S. Computer Science</b>, University of California, San Diego <span style="float: right;">Dec 2016</span></p>
EXPERIENCE	<p><b>Research Assistant</b>, Northwestern University @Database Group <span style="float: right;">Jun 2021 - Present</span></p> <ul style="list-style-type: none"><li>• Proposed the first work on verifiable and efficient query evaluation with zero knowledge proofs for ad-hoc SQL queries in operator-at-a-time fashion</li></ul> <p><b>Research Assistant</b>, University of Washington @PPML Group <span style="float: right;">Sep 2019 - May 2021</span></p> <ul style="list-style-type: none"><li>• Proposed Mean-Split Gini Impurity algorithm (MS-GINI) [2] for Filter-based Feature Selection (FFS)</li><li>• 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</li></ul> <p><b>Data Scientist</b>, IBM @Watson IoT <span style="float: right;">Jan 2018 - Aug 2019</span></p> <ul style="list-style-type: none"><li>• Implemented a case-based reasoning system for disaster prevention based on knowledge graph and deep learning</li><li>• 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</li><li>• Implemented a real-time multi-face recognition system for storage monitoring</li></ul> <p><b>Android Developer</b>, Shenzhen Das Intellitech Co.,Ltd @R&amp;D Department <span style="float: right;">Jul 2017 - Dec 2017</span></p>
SELECTED PUBLICATIONS	<p>[1] <b>Xiling Li</b> 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.</p> <p>[2] <b>Xiling Li</b> 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: <a href="https://doi.org/10.1145/3410530.3414428">https://doi.org/10.1145/3410530.3414428</a></p>
SERVICES	<b>Reviewer:</b> ICML 2021, NeurIPS 2021, ICLR 2022, ICML 2022, NeurIPS 2022, ICLR 2023
INVITED TALKS	<b>Privacy + Machine Learning</b> , Northwestern AI Journal Club, Nov 2021.
SKILLS	C++, Python, Java, EMP-toolkit, Scikit-Learn, PyTorch, MP-SPDZ, AWS EC2, Ubuntu, Docker