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## **Education & Experience**

### **Indiana University Bloomington**

Bloomington, IN

Ph.D candidate

· Working as an Research Assistant in private learning

Aug. 2017 - Aug. 2021

### **Indiana University Bloomington**

Bloomington, IN

MASTER OF COMPUTER ENGINEERING

Aug. 2017 - Dec. 2019

· Working as a Research Assistant in the field of Privacy, Deep Learning and Computer Architecture

Jinan, China

U.S.A

B.S. IN COMPUTER SCIENCE AND ENGINEERING

Mar. 2013 - Aug. 2017

Overall GPA: 91.76/100: Rank: 4/300:

### **Publications**

**Shandong University** 

[C10] Qian Lou, Bo Feng, Geoffrey C. Fox, and Lei Jiang "Glyph: Fast and Accurately Training Deep Neural Networks on Encrypted Data", Arxiv 2019

[C9] Qian Lou, Sarath Janga and Lei Jiang "Helix: Algorithm/Architecture Co-design for Accelerating Nanopore Genome Base-calling", 29th International conference on Parallel Architectures and Compilation Techniques (PACT 2020)

[C8] Qian Lou, Feng Guo, Kim Minje, Lantao Liu and Lei Jiang "AutoQ: Automated Kernel-Wise Network Quantization", International Conference on Learning Representations (ICLR 2020)

[C7] Farzaneh Zokaee, Qian Lou, Nathan Youngblood, Weichen Liu, Yiyuan Xie and Lei Jiang "LightBulb: A Photonic-Nonvolatile-Memorybased Accelerator for Binarized Convolutional Neural Networks", IEEE/ACM Design, Automation & Test in Europe Conference & Exhibition (DATE 2020)

[C6] Qian Lou, Wenyang Liu, Weichen Liu and Lei Jiang "MindReading: An Ultra Low-Power Nanophotonic Accelerator for EEG-based Intention Recognition", IEEE/ACM Asia and South Pacific Design Automation Conference (ASP-DAC 2020).

[C5] Qian Lou, Lei Jiang "SHE:A fast and accurate deep neural networks for encrypted data", Thirty-third Conference on Neural Information Processing Systems (NeurIPS 2019).

[C4] Qian Lou, Lei Jiang "Towards a fast and accurate deep neural networks for encrypted data", Thirty-sixth International Conference on Machine Learning (ICML 2019 workshop on privacy and security).

[C3] Weichen Liu, Wenyang Liu, Yichen Ye, Qian Lou, Yiyuan Xie and Lei Jiang "Holylight: A Nanophotonic Accelerator for Deep Learning in Data Centers", IEEE/ACM Design, Automation & Test in Europe Conference & Exhibition (DATE 2019).

[C2] Qian Lou, Wujie Wen, and Lei Jiang "3DICT: A Reliable and QoS Capable Mobile Process-In-Memory Architecture for Lookup-based CNNs in 3D XPoint ReRAMs", IEEE/ACM International Conference On Computer Aided Design (ICCAD 2018)

[C1] Qian Lou, Mengying Zhao, Lei Ju, Chun Jason Xue, Jingtong Hu, Zhiping Jia "Runtime and reconfiguration dual-aware placement for SRAM-NVM hybrid FPGAs.", IEEE Non-Volatile Memory Systems and Applications Symposium (NVMSA 2017)

[il] Qian Lou, and Lei Jiang "BRAWL: A Spintronics-Based Portable Basecalling-in-Memory Architecture for Nanopore Genome Sequencing", IEEE Computer Architecture Letters (CAL 2018)

### **Committee Services**

2020	NeurIPS 2020 Reviewer, 34th Conference on Neural Information Processing Systems (NeurIPS 2020)	Canada
2020	ICML 2020 Reviewer, Thirty-seventh International Conference on Machine Learning (ICML 2020)	Australia
2019	JETC Reviewer, ACM Journal on Emerging Technologies in Computing Systems (JETC 2019)	<b>United States</b>
2018	ASPDAC Sub-Reviewer, IEEE 23th Asia and South Pacific Design Automation Conference (ASPDAC 2018)	United States

Honorable award, The Mathematical Contest in Modeling

Honors & Awards				
2020	DAC young fellowship, 57th Design Automation Conference (DAC 2020)	Virtual		
2019	Travel Award, Thirty-third Conference on Neural Information Processing Systems (NeurIPS 2019)	Vancouver, Canada		
2018	Best paper nominee, 2018 International Conference On Computer Aided Design	San Diego, U.S.A		

QIAN LOU · RÉSUMÉ JULY 18, 2020



# 36th International Conference on Machine Learning (ICML 2019 workshop on security and privacy )

Long Beach, United States

PRESENTER FOR OUR PAPER: SHE

June. 2019

• Introduced our fast and accurate deep neural networks on encrypted data

### 37th International Conference On Computer Aided Design (ICCAD 2018)

San Diego, United States

PRESENTER FOR OUR PAPER: 3DICT

Nov. 2018

· Introduced 3DICT accelerating lookup-based convolutional neural networks using the emerging memory technology

### ACM/IEEE International Symposium on Low Power Electronics and Design (ISLPED 2017)

Taipei, Taiwan

July. 2017

PRESENTER FOR A PAPER: XNOR-POP

Introduced XNOR-POP accelerating binarized neural networks using the emerging memory technology

# **Extracurricular Activity**

### **Student Union in Shandong University**

Jinan, China

Jun. 2013 - Jun.2014

CORE MEMBER & PRESIDENT AT 2014

- Environment Evaluation Survey of Jinan city.
- Volunteer