

Qian Lou

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Education & Experience

Indiana University Bloomington

ASSOCIATE INSTRUCTOR

- Working as an Associate Instructor in the course of machine learning for signal processing

Bloomington, IN

Dec. 2019 - May 2020

Indiana University Bloomington

MASTER OF COMPUTER ENGINEERING

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

Bloomington, IN

Aug. 2017 - Dec. 2019

Shandong University

B.S. IN COMPUTER SCIENCE AND ENGINEERING

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

Jinan, China

Mar. 2013 - Aug. 2017

Publications

[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**, and Lei Jiang "MENDEL: Algorithm/Hardware Co-design for Accelerating Nanopore Genome Base-calling", *Under review*

[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-Memory-based 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)*

[j1] **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 **ICML 2020 Reviewer**, Thirty-seventh International Conference on Machine Learning (ICML 2020)

2019 **JETC Reviewer**, ACM Journal on Emerging Technologies in Computing Systems (JETC 2019)

2018 **ASPAC Sub-Reviewer**, IEEE 23th Asia and South Pacific Design Automation Conference (ASPAC 2018)

Australia

United States

United States

Honors & Awards

2019 **Travel Award**, Thirty-third Conference on Neural Information Processing Systems (NeurIPS 2019)

2018 **Best paper nominee**, 2018 International Conference On Computer Aided Design

2015 **Honorable award**, The Mathematical Contest in Modeling

Vancouver, Canada

San Diego, U.S.A

U.S.A

Presentation

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

PRESENTER FOR A PAPER: XNOR-POP

July, 2017

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

Extracurricular Activity

Student Union in Shandong University

Jinan, China

CORE MEMBER & PRESIDENT AT 2014

Jun. 2013 - Jun.2014

- Environment Evaluation Survey of Jinan city.
- Volunteer