

# Qian Lou

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## Education

### Indiana University Bloomington

MASTER OF COMPUTER ENGINEERING

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

Bloomington, IN

Aug. 2017 - Exp. 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

[C8] **Qian Lou**, and Lei Jiang "MENDEL: Algorithm/Hardware Co-design for Accelerating Nanopore Genome Base-calling", *Under review*

[C7] **Qian Lou**, Kim Minje, Lantao Liu and Lei Jiang "AutoQB: AutoML for Network Quantization and Binarization on Mobile Devices", *Arxiv*

[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", *(NeurIPS)*, 2019.

[C4] **Qian Lou**, Lei Jiang "Towards A fast and accurate deep neural networks for encrypted data", *(ICML workshop)*, 2019.

[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

## Honors & Awards

### INTERNATIONAL

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

San Diego, U.S.A

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

U.S.A

## Presentation

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

San Diego, United States

PRESENTER FOR OUR PAPER: 3DICT

Nov. 2018

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

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

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