

Mengling Liu

<https://mengling-l.github.io/> | <https://github.com/MengLing-L>

Education

The Hong Kong Polytechnic University	2023 – Current
<ul style="list-style-type: none">• Ph.D. Student in Computing• Advisor: Prof. AU Man Ho Allen	
The University of Hong Kong	2020 – 2022
<ul style="list-style-type: none">• M.S. in Electronic Commerce and Internet Computing• Advisor: Prof. AU Man Ho Allen	
Chongqing University of Posts and Telecommunications	2012 – 2016
<ul style="list-style-type: none">• B.S. in Computer Science	

Work Experience

Research Assistant , The University of Hong Kong, Department of Computer Science	2022
Engineer , Tencent Technology (Shenzhen) Co.Ltd, Department of Advertising	2016 - 2020

Publications

- **Mengling Liu**, Yang Heng, Xingye Lu, Man Ho Au. JesseQ: Efficient Zero-Knowledge Proofs for Circuits over Any Field, **S&P 2025**
- Zhikang Xie, **Mengling Liu**, Haiyang Xue, Man Ho Au, Robert H. Deng, Siu-Ming Yiu. Direct Range Proofs for Paillier Cryptosystem and Their Applications, **CCS 2024**
- Haiyang Xue, Man Ho Au, **Mengling Liu**, Kwan Yin Chan, Handong Cui, Xiang Xie, Tsz Hon Yuen, Chengru Zhang. Efficient multiplicative-to-additive function from Joye-Libert cryptosystem and its application to threshold ECDSA, **CCS 2023**
- Xiao Yang, **Mengling Liu**, Man Ho Au, Xiapu Luo, Qingqing Ye. Efficient verifiably encrypted ECDSA-like signatures and their applications, **TIFS 2022**

Research Competition

- ZPrize 23/24: High Throughput Signature Verification. (250,000 USD Cash Award)**
- Compiling the ECDSA signature verification process as a circuit in Varuna.
- ZPrize 22/23: PLONK-DIZK GPU Acceleration. (550,000 USD Cash Award)**
- Enhancing Plonk with GPU acceleration and distribution.

Internship

Engineer , Alibaba Group Holding Ltd, Department of Taobao	2016
Engineer , Tencent Technology (Shenzhen) Co.Ltd, Department of Advertising	2015