Ren **Yanjing**

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Education

The Chinese University of Hong Kong · **Ph.D Candidate**
Computer Science and Engineering, Supervisor: Prof. Patrick P. C. Lee

Hong Kong, China
2022.06 - now

University of Electronic Science and Technology of China · **Master**
Computer Science and Engineering, Supervisor: Prof. Jingwei Li

Chengdu, China
2019.09 - 2022.06

University of Electronic Science and Technology of China · **Bachelor**
Information Security

Chengdu, China
2015.09 - 2019.06

Research Interests and Achievements

Research Interests

- Data reduction techniques for storage systems: deduplication, loss-less compression.

- Key-value stores: LSM-tree performance optimization, distributed key-value stores.

- Secure storage systems: secure deduplication, access control, and confidential computing.

Summary of Research Achievements

- Publications: 9 CCF-A papers (2 as first author) and 2 CCF-B papers.

- Citations: 160+ total citations with an h-index of 6.

- Patents: 4 granted patents in the field of secure storage systems.

Publication

SGX-Enabled Encrypted Cross-Cloud Data Synchronization
Jia Zhao, Yanjing Ren, Jingwei Li, and Patrick P. C. Lee.

IEEE ICDCS
2025

Enhancing LSM-tree Key-Value Stores for Read-Modify-Writes via Key-Delta Separation
Jinhong Li, Yanjing Ren, Shujie Han, and Patrick P. C. Lee.

IEEE ICDE
2024

ELECT: Enabling Erasure Coding Tiering for LSM-tree-based Storage
Yanjing Ren, Yuanming Ren, Xiaolu Li, Yuchong Hu, Jingwei Li, and Patrick P. C. Lee.

USENIX FAST
2024

CDCache: Space-Efficient Flash Caching via Compression-before-Deduplication
Hengying Xiao, Jingwei Li, Yanjing Ren, Ruijin Wang, Xiaosong Zhang.

IEEE INFOCOM
2024

FeatureSpy: Detecting Learning-Content Attacks via Feature Inspection in Secure Deduplicated Storage
Jingwei Li, Yanjing Ren, Patrick P. C. Lee, Yuyu Wang, Ting Chen, Xiaosong Zhang.

IEEE INFOCOM
2023

Revisiting Frequency Analysis against Encrypted Deduplication via Statistical Distribution
Jingwei Li, Guoli Wei, Jiacheng, Liang, Yanjing Ren, Patrick P. C. Lee and Xiaosong Zhang.

IEEE INFOCOM
2022

Tunable Encrypted Deduplication with Attack Resilient Key Management
Zuoru Yang, Jingwei Li, Yanjing Ren, Patrick P. C. Lee and Xiaosong Zhang.

ACM Transactions on Storage
2022

Enabling Secure and Space Efficient Metadata Management in Encrypted Deduplication
Jingwei Li, Suyu Huang, Yanjing Ren, Patrick P. C. Lee and Xiaosong Zhang.

IEEE Transactions on Computers
2022

Accelerating Encrypted Deduplication via SGX
Yanjing Ren, Jingwei Li, Zuoru Yang, Patrick P. C. Lee and Xiaosong Zhang.

USENIX ATC
2021

Balancing storage efficiency and data confidentiality with tunable encrypted deduplication
Jingwei Li, Zuoru Yang, Yanjing Ren, Patrick P. C. Lee and Xiaosong Zhang.

ACM EuroSys
2020

Metadedup: Deduplicating metadata in encrypted deduplication via indirection *IEEE MSST*
Jingwei Li, Patrick P. C. Lee, Yanjing Ren, and Xiaosong Zhang. *2019*

Patent

A distributed ciphertext shared key management method and system based on encrypted data deduplication *CN112152798B[P]*
Jingwei Li, Suyu Huang, Yanjing Ren, Zuoru Yang, Patrick P. C. Lee. *2023.10.03*

An efficient encryption deduplication method based on hardware security zone *CN112947855B[P]*
Jingwei Li, Yanjing Ren, Yang Zuoru, Patrick P. C. Lee, Xiaosong Zhang. *2022.10.14*

An Adjustable Encryption Deduplication Method *CN111338572B[P]*
Jingwei Li, Zuoru Yang, Yanjing Ren, Patrick P. C. Lee, Xiaosong Zhang. *2021.09.14*

An efficient metadata management method in an encrypted deduplication system *CN110109617B[P]*
Jingwei Li, Patrick P. C. Lee, Yanjing Ren, Xiaosong Zhang. *2020.05.12*

Honor

Outstanding Graduate Paper Award (ACM Chengdu Chapter)	2023
Outstanding Master's Thesis of UESTC (UESTC)	2022
Outstanding University Graduates (Sichuan Province, China)	2022
China Integrated Circuit Innovation and Entrepreneurship Competition (Third Award)	2020
Excellent graduation thesis of UESTC (UESTC)	2019
Outstanding Graduates of UESTC (UESTC)	2019
ASC Student Supercomputer Challenge (Second Prize)	2019
ASC Student Supercomputer Challenge (Second Prize)	2018
Mathematical Contest in Modeling (Meritorious Winner)	2017
China Undergraduate Mathematical Contest in Modeling (First Prize)	2017