# HONG HUANG

Github 

Google Scholar 

Personal Website

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#### **EDUCATION**

City University of Hong Kong

Ph.D. in Computer Science

City University of Hong Kong

Reseach Assistant in Computer Science

University of Florida

MSc. in Electrical and Computer Engineering

Shanghai Jiao Tong University

BE. in Computer Science and Technology

Hong Kong, China; Sept. 2024 – Jan. 2027 (Expected)
Advised by Dr. Dapeng Wu

 $Hong\ Kong,\ China;\ Sept.\ 2023-Aug.\ 2024$ 

Advised by Dr. Dapeng Wu

Gainesville, United States; Aug. 2021 – May 2023 Advised by Dr. Ruoqu Fang and Dr. Dapeng Wu

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Shanghai, China; Aug. 2017 – June 2021 Advised by Dr. Jian Cao

### SELECTED PUBLICATIONS

Hong Huang, Dapeng Wu "Quaff: Quantized Parameter-Efficient Fine-Tuning under Outlier Spatial Stability Hypothesis." The Annual Meeting of the Association for Computational Linguistics (ACL), 2025. PDF, Code

**Hong Huang**, Hai Yang, Yuan Chen, Jiaxun Ye, Dapeng Wu. "FedRTS: Federated Robust Pruning via Combinatorial Thompson Sampling." The Thirty-Ninth Annual Conference on Neural Information Processing Systems (NeurIPS), 2025. PDF, Code

Hong Huang, Weiming Zhuang, Chen Chen, and Lingjuan Lyu. "FedMef: Towards Memory-efficient Federated Dynamic Pruning." IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR), 2024. PDF

**Hong Huang**, Lan Zhang, Chaoyue Sun, Ruogu Fang, Xiaoyong Yuan, and Dapeng Wu. "Distributed Pruning Towards Tiny Neural Networks in Federated Learning." IEEE 43rd International Conference on Distributed Computing Systems (ICDCS), 2023. (Acceptance rate: 18.9%) PDF

## **EXPERIENCE**

**Tencent** 

Research Intern, Machine Learning Platform Department (MLPD)

Shenzhen, China; Aug. 2025 - present Mentored by Mr. Jianchen Zhu

- Designed ternary quant method ({-1, 0, +1}) with weight reactivation, mitigating the deadzone-trapping issue
- Achieved 3× speedup while matching accuarcy of BF16 baseline on ARC benchmark; submitted to ICLR 2026

SONY AI

Research Intern, Privacy-Preserving Machine Learning (PPML) Team

Tokyo, Japan; Mar. 2023 - Aug. 2023 Mentored by Dr. Lingjuan Lyu

- Developed FedMef, a novel memory-efficient federated dynamic pruning framework
- Achieved 28.5% memory savings while improving the accuracy by 2%; published in CVPR 2024

Meta

Menlo Park, United States; Mar. 2022 - Dec. 2022 Mentored by Dr. Zhijun Lei

Research Assistant, Video Infrastructure Group

• Developed TMAP, a CNN-based texture- and motion-aware in-loop filter for AV1

• Achieved reduction of 4.32% BD-rate and 3.79% VMAF; published in JVCIR

# **LEADERSHIP**

• Serve as leader of FedPruning Research Group, a group of 10+ junior Ph.D. and M.S. students focused on edge computing and model compression; coordinated research leading to 4 papers accepted/submitted to top-tier conferences and transactions within six months (e.g., NeurIPS 2025, TPDS with major revision).