

Wenchang Chai

PhD student in Data Science / UC San Diego

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My current research focuses on privacy in genetic testing.

Education

University of California San Diego / PhD student in Data Science

2026-present

Halicioglu Data Science Institute / Advisor: Haojian Jin

The Hong Kong Polytechnic University / BSc (Hons) in Computer Science

2022-2026

First Class Honours / Minor in Artificial Intelligence and Information Engineering

Prior publications

Litchilnst: Instance segmentation of the main fruit-bearing branch via fruit-branch association for robotic litchi harvesting

Yukun Qian, **Wenchang Chai**, Haitao Wang, Zhiyang Mai, Liangliang Zhou, Hejun Wu
Biosystems Engineering (2026). 271, 104586. doi:10.1016/j.biosystemseng.2026.104586

Verifying energy generation via edge LLM for web3-based decentralized clean energy networks
Co-first author with Shan Jiang

Shan Jiang, **Wenchang Chai**, Mingjin Zhang, Jiannong Cao, Shichang Xuan, Jiaying Shen
Information Fusion (2026). 127, Part A, 103752. doi:10.1016/j.inffus.2025.103752

Thinking Before You Speak: A Proactive Test-time Scaling Approach

Cong Liu, **Wenchang Chai**, Hejun Wu, Yan Pan, Pengxu Wei, Liang Lin
Findings of EMNLP 2025. 24643-24650. doi:10.18653/v1/2025.findings-emnlp.1341

From Interference Mitigation to Toleration: Pathway to Practical Spatial Reuse in LPWANs

Ruonan Li, Ziyue Zhang, Xianjin Xia, Ningning Hou, **Wenchang Chai**, Shiming Yu, Yuanqing Zheng, Tao Gu
ACM MobiCom 2025. 422-437. doi:10.1145/3680207.3723483

Satellite IoT in Practice: A First Measurement Study on Network Availability, Performance, and Costs
First author

Wenchang Chai, Jinhong Liu, Ziyue Zhang, Xianjin Xia, Yuanqing Zheng, Ningning Hou, Qiang Yang, Weiwei Chen, Tao Gu
ACM IMC 2025. 891-899. doi:10.1145/3730567.3764496

Experience

Tencent AI Lab | Jul-Sep 2024

Research Intern / AI for Science

Worked on scheduling and data caching for
Kubernetes-based batch computing.

Selected honours

COMPUTHON / Second Runner-up | 2026

Undergraduate Stream / Team Podex / PolyU

Au Bak Ling Charity Trust Scholarship | 2025

The Hong Kong Polytechnic University

Dean's Honours List | 2023/24, 2024/25

The Hong Kong Polytechnic University