# Dayi Fan

## PERSONAL INFO

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## EDUCATION

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|---|---|
| 2022.01-CURRENT | Ph.D. student in Computer Science and Engineering, **The Ohio State University**, USA<br>Advised by Prof. Xiaodong Zhang<br>Topic: Accelerations for complex and irregular data-centric algorithms with high scalability |
| 2017.09-2021.07 | BEng. in Microelectronics Science and Engineering, Southern University of Science and Technology, China<br>Advised by Prof. Quan Chen<br>Topic: RRAM-based neural network optimizations |
| 2021.01-2021.05 | Exchange student in Computer Science and Engineering, National University of Singapore, Singapore<br>Advised by Prof. Trevor E. Carlson<br>Topic: Spike neural network for LSTM |

## RESEARCH INTEREST

My research focuses on parallel computing, algorithm engineering, and data management acceleration in computer systems.

By leveraging modern hardware accelerators (e.g., GPUs), my work aims to significantly enhance computational throughput and efficiency in large-scale systems, addressing key challenges in data-driven fields such as big data analytics, machine learning, and scientific computing.

My research interests also extend to the interaction between AI and computer systems. I am open to addressing AI-driven challenges in system design and databases, such as accelerating model training, developing intelligent storage solutions, and enhancing data retrieval efficiency.

## PUBLICATIONS

2024    **RR-Compound: RDMA-Fused gRPC for Low Latency, High Throughput, and Easy Interface**
Liang Geng, Hao Wang, Jingsong Meng, **Dayi Fan**, Sami Ben-Romdhane, Hari Kadayam Pichumani, Vinay Phegade, Xiaodong Zhang
*IEEE Transactions on Parallel and Distributed Systems (TPDS 2024)*

2024    **X-TED: Massive Parallelization of Tree Edit Distance**
**Dayi Fan**, Rubao Lee, Xiaodong Zhang
*Proceedings of the VLDB Endowment (VLDB 2024)*

## ACADEMIC PERFORMANCE

Postgraduate GPA: 3.951/4.000
Undergraduate GPA: 3.90/4.00

June 2021    Excellent Graduate Award
Southern University of Science and Technology

2017-2020    First Class Student Scholarship (Top 5%, three years)
Southern University of Science and Technology

## TEACHING EXPERIENCE

Spring 2022 – Spring 2024 Teaching Assistant in CSE 3421: Computer Architecture

## ADDIONALS

Languages: English, Chinese, Cantonese

Music: Cello and Piano Player

Enthusiast: Photography and Cooking