

BINGYAO LI

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EDUCATION

University of Pittsburgh

Aug. 2020 - Present

Ph.D. in Computer Science

Advisor: Dr. Xulong Tang

Tianjin University

Sep. 2017 - Jan. 2020

M.S. in Computer Science and Technology

Advisor: Dr. Ce Yu, Graduated with Honor

Tianjin University

Sep. 2013 - July 2017

B.E. in Computer Science and Technology

Graduated with Honor

PUBLICATIONS

- [1] Bingyao Li^{*}, Qi Xue^{*}, Geng Yuan^{*}, Sheng Li, Xiaolong Ma, Yanzhi Wang and Xulong Tang, “*Optimizing Data Layout for Training Deep Neural Networks*,” WWW 2022 workshop.
^{*} The authors contribute equally.
- [2] Bingyao Li, Jieming Yin, Youtao Zhang, Xulong Tang, “*Improving Address Translation in Multi-GPUs via Sharing and Spilling aware TLB Design*,” MICRO 2021.
- [3] Bingyao Li, Ce Yu, Chen Li, Xiaoteng Hu, Jian Xiao, Shanjiang Tang, Chenzhou Cui, and Dongwei Fan, “*mcatCS: A Highly Efficient Cross-Matching Scheme for Multi-Band Astronomical Catalogs*,” Publication of the Astronomical Society of the Pacific, 2019, 131(999).
- [4] Ce Yu, Bingyao Li, Jian Xiao, Chao Sun, Shanjiang Tang, Chongke Bi, Chenzhou Cui, and Dongwei Fan, “*Astronomical Data Fusion: Recent Progress and Future Prospects - A Survey*,” Springer Experimental Astronomy, 2019(6).
- [5] Bingyao Li, Ce Yu, Xiaoteng Hu, Jian Xiao, Shanjiang Tang, Lianmeng Li, Bin Ma, “*An Efficient Retrieval Method for Astronomical Catalog Time Series Data*,” ICA3PP 2018.
- [6] Xiaoteng Hu, Ce Yu, Bingyao Li, Shanjiang Tang, Jian Xiao, Yanyan Huang, “*GAIDR: An Efficient Time Series Subsets Retrieval Method for Geo-Distributed Astronomical Data*,” IEEE HPCC 2018.

RESEARCH EXPERIENCE

University of Pittsburgh

2020 - Present

Research Assistant/Teaching assistant

Advisor: Dr. Xulong Tang

- Optimize address translation in multi-GPU

Tianjin University

2017 - 2020

Research Assistant

Advisor: Dr. Ce Yu

- Develop time series subsets retrieval system for large-scale astronomical image data
- Optimize cloud-based storage for long-term astronomical archive data
- Propose a distributed cross-matching scheme for billion-row astronomical data
- Propose an automatic method for cross-matching celestial objects accurately

ICT of Chinese Academy of Science, Beijing

2019 Summer

Visiting Scholar

Advisor: Dr. Yungang Bao

- Port latency-sensitive benchmark to RISC-V architecture
- Evaluate the performance of Tailbench-Riscv on LvNA (Labeled RISC-V)

SELECTED HONORS & AWARDS

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| CS50 Fellowship, University of Pittsburgh | 2022 |
| SCI Fellowship, University of Pittsburgh | 2020 |
| National Scholarship, Ministry of Education of China | 2019 |
| Graduate Scholarship - First Prize, Tianjin University | 2017, 2019 |

TEACHING

- Teaching Assistant of CS 1550: Introduction to Operating Systems, Pitt, Fall 2021