Runzhou Han

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Research Interests

- Large-scale storage systems
- Serverless computing
- Data provenance

Education

- **Iowa State University:** *Sept.2019-now*
  Ph.D., Computer Engineering, advised by **Dr. Mai Zheng**.
- **Boston University:** *Sept.2017-Jan.2019*
  Master of Science, Electrical and Computer Engineering.
- **Wuhan University:** *Sept.2013-July.2017*
  Bachelor of Science, Physics.

Publication

[1] **On the Reproducibility of Bugs in File-System Aware Storage Applications**
Duo Zhang, Tabassum Mahmud, Om R. Gatla, Runzhou Han, Yong Chen, and Mai Zheng
Proceedings of the 16th IEEE International Conference on Networking, Architecture, and Storage (NAS), 2022.

[2] **PROV-IO: An I/O-Centric Provenance Framework for Scientific Data on HPC Systems**
Runzhou Han, Suren Byna, Houjun Tang, Bin Dong, and Mai Zheng
Proceedings of the 31st International Symposium on High-Performance Parallel and Distributed Computing (HPDC), 2022

[3] **A Study of Failure Recovery and Logging of High-Performance Parallel File Systems**
Runzhou Han, Om R. Gatla, Mai Zheng, Jinrui Cao, Di Zhang, Dong Dai, Yong Chen, Jonathan Cook.
ACM Transactions on Storage (TOS), 2022.

[4] **SentiLog: Anomaly Detecting on Parallel File Systems via Log-based Sentiment Analysis**
Di Zhang, Dong Dai, Runzhou Han, Mai Zheng.
Proceedings of the 13th ACM Workshop on Hot Topics in Storage and File Systems (HotStorage), July 2021.
Best paper nominee!

[5] **Fingerprinting the Checker Policies of Parallel File Systems**
Runzhou Han, Duo Zhang, Mai Zheng.
IEEE/ACM Fifth International Parallel Data Systems Workshop (PDSW), Nov 2020.

[6] **On Failure Diagnosis of the Storage Stack**
Duo Zhang, Om R. Gatla, Runzhou Han, Mai Zheng.
12th USENIX Workshop on Hot Topics in Storage and File Systems (HotStorage-P), 2020.

[7] **Sound-mediated stable configurations for polystyrene particles**
Mudi Wang, Chunyin Qiu, Shenwei Zhang, Runzhou Han, Manzhu Ke, Zhengyou Liu.
Physical Review E, 2017.

Employment

Iowa State University, Ames, IA *Sept.2019-now*
- Research Assistant
- Advisor: Dr. Mai Zheng

Samsung, Santa Clara, CA *May.2022-Aug.2022*
- Research Scientist Intern
- Advisor: Dr. Yong Chen

Lawrence Berkeley National Laboratory, Berkeley, CA *May.2021-Aug.2021*
- PhD Research Intern
- Advisor: Dr. Suren Byna

Selected Awards

Student Grant, ACM *HPDC 2022.* *July.2022*
Student Grant, USENIX *FAST 2022.* *Feb.2022*
Student Grant, USENIX *FAST 2020.* *Feb.2020*
Wendell Miller Scholarship, Iowa State University. *Sept.2019*

Invited Talks

[1] **Improving Storage Reliability and I/O Observability in High-performance Computing Systems.** IBM research, Virtual, *Mar. 2023.*