



Shanxi University Team



Jiawei Gao(advisor), Guoyuan Li, Zonghao Zhang, Jing Li, Ziheng Xu, Wenjie Zhao, Mengxiang Yang

Department of Computer Science and Technology, Shanxi University, Shanxi 030006, China

About Shanxi University



Shanxi University, one of China's oldest institutions, is a "Double First-Class" university with a rich academic history dating back to 1902. It has contributed significantly to China's higher education through its comprehensive programs and strong focus on research and innovation. The university is committed to advancing its mission of excellence, nurturing talent, and expanding its global partnerships, striving to become a leading research university in China.

Team members

Guoyuan Li:

GPU Programming, performance tuning

Zonghao Zhang:

OS, architecture

Jing Li:

devops, artificial intelligence

Ziheng Xu:

algorithm, performance tuning

Wenjie Zhao:

network, OS

Mengxiang Yang:

algorithm, math



Optimization Strategies

We are familiar with a lot of skills that are divided into three main parts

1. Increasing parallelism, in which we often use different tools to adjust the parallelism strategy and migrate the code towards the GPU if necessary.
2. Reduce unnecessary computation. When reading code, we often try to modify the code implementation and algorithms to reduce unnecessary computation.
3. Adjusting access, we adjust the order of computation and access in the code, aiming to minimize the problems caused by access.
4. In addition, we also have a deep understanding of Linux, as well as proficiency in related skills, to minimize accidents and play our level.

Our Preparation & Activities

We have many activities about Linux and HPC, both online and offline. We often join hands with SXU-Opensource-Association to give offline lectures on Linux usage and supercomputing cluster usage, with the aim of spreading the basic knowledge of supercomputing and facilitating people's research and study. We also set up some blogs for technical sharing and hold some online meetings regularly to answer people's problems.

