

Lin Gan

Tsinghua University & National Supercomputing Center in Wuxi, China

Scaling Geoscience Applications on Sunway Supercomputer

Abstract:

As one of the most powerful supercomputing systems in the world, Sunway TaihuLight adopts many specific architectural features that are both challenging and promising, and has well supported a lot of numerical applications with outstanding performance being obtained. Based on our recent efforts on scaling different geoscience applications such as climate modeling and exploration geophysics, this talk gives introduction to the novel techniques proposed to fully explore the architectural potentials, and discussions on how we can learn from the pro and cons of the current-generation processor.