

One Day Workshop on Power-Aware High Performance Computing

Date: May 4, 2017

Venue: C-DAC Knowledge Park, Bengaluru-560038

INTRODUCTION

The designing of High Performance Computing (HPC) system is a multi-dimensional challenge. Power and energy are the important concerns right from the HPC system design to HPC system operations for achieving the next generation supercomputers. When Exascale computer systems begin operation, estimated for early 2022, we will escort in an era with power and energy consumption as scalable computing's primary concerns. Existing energy-efficient approaches rely heavily on just low-power hardware, which is inadequate to overcome the emerging challenges. It is pivotal for hardware to enable energy-efficient mechanisms to dynamically optimize power consumption for various workloads and to reduce data motion, which increases energy consumption. The software methods will be pivotal for realizing energy efficiency through runtime adaptation of the power-managed components through its abstraction. To achieve viable energy-efficient performance, revolutionary software methods as well as a stronger integration between hardware, system software, and applications will be required. Equally important will be the ability to conduct fine-grained spatial and temporal measurements and control, which will facilitate in achieving energy efficiency computing across all the layers of current and future HPC systems.

The key objective of this workshop is to provide a platform for the researchers, academia, and industries to share their thoughts and giving the insights in building the next generation power-aware HPC systems. C-DAC, being a champion in high-performance computing wants to takes these concerns forward to find the viable elucidation through this workshop under the National Supercomputing Mission (NSM).

TOPICS INCLUDE

- Current state-of-the-art and future challenges in power optimization and roadmap
- Power optimization Techniques
- Adaptive Power Management perspective in HPC

TARGET AUDIENCES:

The program is designed for HPC Practitioner, Academics and Researchers

ONLINE REGISTRATION

Registration URL: <http://bit.ly/2oARKaW>

No Registration fees for Participation

Participants are requested to make their own arrangements for transportation and accommodation.

The event will be technically sponsored by IEEE Bangalore Section.

ORGANISED BY

C-DAC Pune & Bengaluru

in association with IEEE BANGALORE COMPUTER SECTION

Venue: C-DAC, Knowledge Park,
Byappanahalli, Bengaluru - 560 038

Date: May 4, 2017.

WORKSHOP CO-ORDINATOR:

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