WORKSHOP ON

PARALLEL PROCESSING FOR POWER SYSTEMS ANALYSIS

Sponsored by: National Super Computing Mission

nsm
NATIONAL
SUPERCOMPUTING
MISSION

Dates: **14 - 18 August 2023**

Venue: **Dept. of Electrical Engineering,**
Indian Institute of Science, Bengaluru

Eligibility for workshop

Electrical Engineering Ph.D. Students & Faculty
from Engineering Colleges / Universities
Industry personnel working in Power Systems

Speakers

Prof. Anil M Kulkarni
IIT Bombay

Prof. R Bhimasingu
IIT Hyderabad

Prof. Gurunath Gurrala
IISc Bengaluru

PhD Students
Vibhuti Sahu
Francis C Joseph
Durvesh Kalke
Ajeesh A
Rajesh KB
Shashank S

Note to Participants

Workshop contains 20% theory and 80% hands-on sessions. So, every participant should bring their own laptop for the workshop. Without a laptop, you will not be allowed to attend. No sharing of laptop is allowed. Minimal exposure to C-language is essential. Kindly refresh your C-language basics before attending the workshop.

OBJECTIVES

The workshop is intended to bridge the gap between power system engineers and computer science engineering. The participants will be familiarized with two algorithms: Load Flow and Transient Stability, which are very important for bulk power system analysis. Using these algorithms as reference, parallelization aspects will be discussed to run on multi-core computers using OpenMP and MPI paradigms and implemented. It is the objective of the workshop that the participants will be able to continue utilizing the knowledge obtained in their research or teaching.

TOPICS COVERED

- Load-flow Analysis Program using C.
- Power System Dynamics Simulations using C
- Shared Memory Parallelization - OpenMP
- Message Passing Interface (MPI) and its applications.
- Parallelization of Load-flow Analysis Program
- Parallelization of Transient Stability Program

ENROLLMENT

Registration is mandatory for attending the workshop. Registration will be accepted on a first-come first-serve basis. Limited seats are available. [Application link here](#)
Last Date to Apply is **10 July 2023**

Shortlisted candidates will be provided with the link for payment of Rs. 1000+18% GST for Registration Confirmation within one week after the closing date

Travel support up to INR 3000 and FREE Accommodation will be provided to Students and Faculty