One Day
Faculty Orientation Program

In Association with

Walchand College of Engineering, Sangli

Under the Aegis of

National Supercomputing Mission Govt. of India

On

"Empowering Academia: Integrating High-Performance Computing in Education and Research"

14th December 2024

Organized By

Rayat Shikshan Sanstha's, Karmaveer Bhaurao Patil College of Engineering, Satara-Maharashtra

Department of Computer Science & Engineering

Activity Report
One Day Faculty Orientation Program On

"Empowering Academia: Integrating
High-Performance Computing in Education and Research"

Date: 14th December, 2024

Organized By: Department of Computer Science & Engineering, Rayat Shikshan Sanstha's, Karmaveer Bhaurao Patil College of Engineering, Satara

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Venue: Rayat Shikshan Sanstha's, Karmaveer Bhaurao Patil College of Engineering, Satara
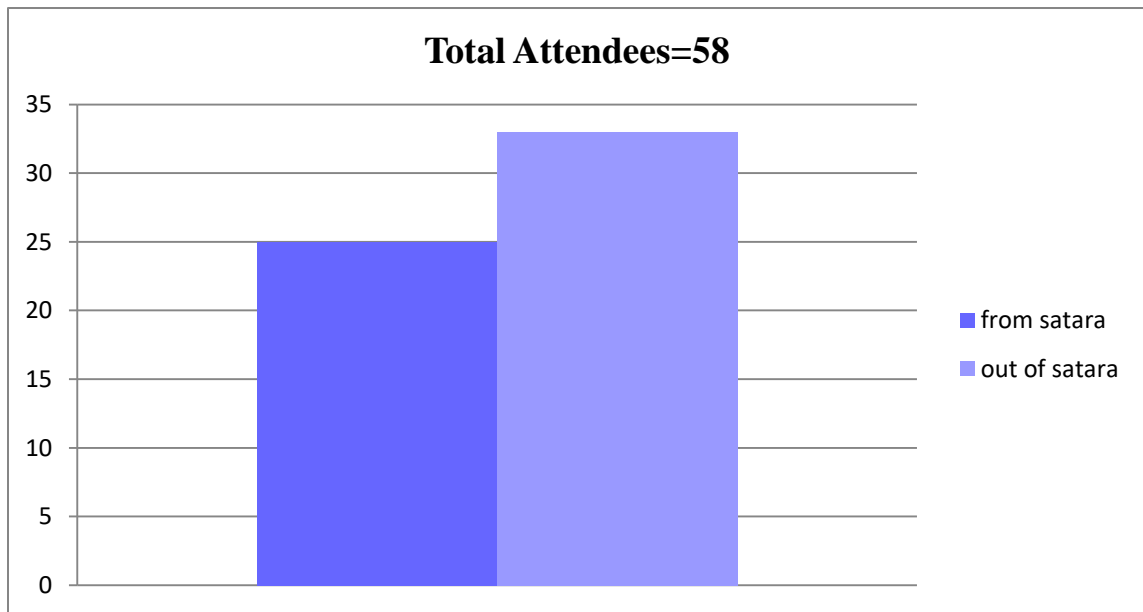
Coordinators:

- Dr. Shabina Modi

  Associate Professor, Computer Science & Engineering Department, KBPCOE Satara

- Mr. A. P. Kshirsagar

  Assistant Professor, Computer Science & Engineering Department, KBPCOE Satara
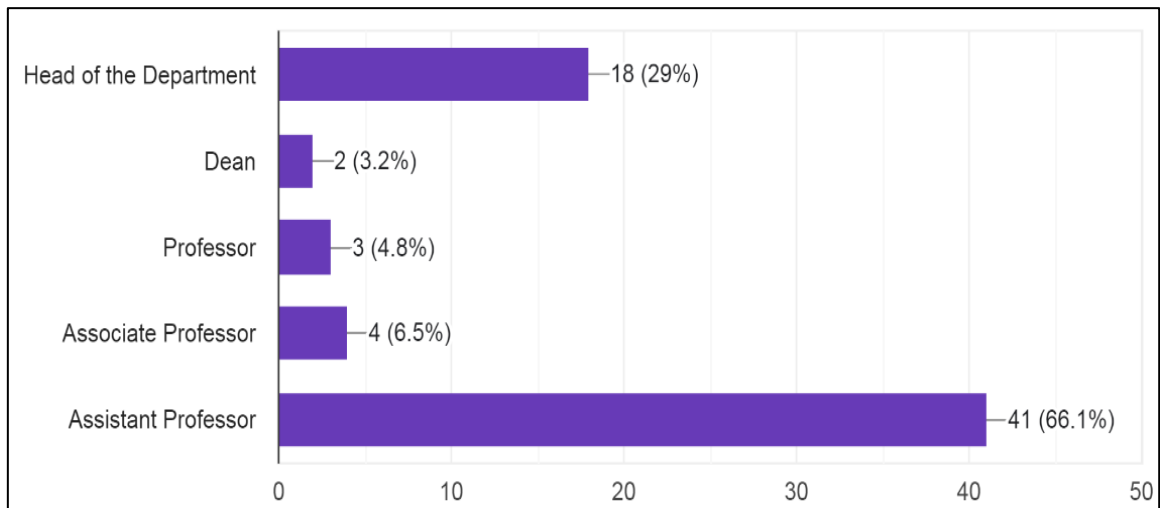
Resource Persons:

- Dr. D. B. Kulkarni, Professor, Walchand College of Engineering, Sangli
- Mr. Mandar Gurav, Parallel Programming Trainer, Freelance Consultant
- Mr. Mayur Rathi, Assistant Professor, Walchand College of Engineering, Sangli
- Ms. Aprupa Pawar, Assistant Professor, Walchand College of Engineering, Sangli

Details of Attendees:

- The program witnessed enthusiastic participation from AICTE approved engineering and polytechnic institutes across all over Maharashtra and Industrial persons. Over 58 participants including HODs, Deans, Professors, Associate Professors as well as Assistant Professors from various institutes engaged actively in the sessions, raising queries and sharing perspectives.

- 33 participants were from engineering institutes located out of satara region and 25 participants were from engineering institutes located in satara region vicinity

Total Attendees=58

Number of Attendees

Designation wise analysis of attendees

Details of Activity:

The Faculty Orientation Program aimed to provide a platform for educators and researchers to gain insights into the transformative role of High-Performance Computing (HPC) in academia and research. The program focused on emerging technologies such as Artificial Intelligence (AI) and their integration into educational and research domains.

Inauguration:

The program commenced with an inaugural session graced by dignitaries from both organizing institutions and the National Supercomputing Mission. Coordinator of the orientation program, Dr. S. J. Modi gave brief preface of the program. In-charge principal of KBPCOE Satara, Dr. Y. K. Kanase welcomed and felicitated all the dignitaries from both organizing institutions. Coordinator Dr. S. J. Modi and Head of the Computer Science & Engineering Department, Mr. Ganesh Dangat felicitated resource persons of the program. The Chief Guests, Dr. D. B. Kulkarni, Professor, Walchand College of Engineering, Sangli and Mr. Ashish Kuvelkar Scientist G, CDAC Pune delivered an inspiring keynote address emphasizing the critical role of HPC in revolutionizing education and research methodologies.

Tribute to Karmaveer Anna and Laxmibai Vahinisaheb during Inauguration

Felicitation of Chief Guest of program Dr. D. B. Kulkarni by Dr. Y. K. Kanase

Felicitation of Mr. Mandar Gurav by Mr. Ganesh Dangat

Felicitation of Mr. Mayur Rathi by Dr. Y. K. Kanase

Felicitation of Ms. Aprupa Pawar by Dr. S. J. Modi

Inauguration of the Program

Dr. Y. K. Kanase and Dr. S. J. Modi during inauguration program

Technical Sessions:

The program featured expert-led technical sessions covering the following topics:

1. **Introduction to High-Performance Computing:**
   - o Speaker: Mr. Ashish Kuvelkar, Scientist G, CDAC Pune &
   - o Overview of HPC, its architecture, and applications in academia and research.

2. **HPC in Artificial Intelligence:**
   - o Speaker: Dr. D. B. Kulkarni, Professor, Walchand College of Engineering, Sangli
   - o Overview of HPC, its architecture, and applications in academia and research.

3. **Parallel Programming**
   - o Speaker: Dr. K. B. Manwade, Professor, Hirasagar Institute of Technology, Nida Soshi
   - o Insights into parallel programming
   - o Insights into the synergy between HPC and AI, and their role in addressing complex research problems.

4. **Integration of HPC in Academic Curriculum:**
   - o Speaker: Mr. Mandar Gurav, Parallel Programming Trainer, Freelance Consultant
   - o Strategies to incorporate HPC concepts into engineering and science curricula

5. **Hands-on Session on HPC Tools:**
   - o Speaker: Mr. Mayur Rathi & Ms. Aprupa Pawar, Assistant Professor, Walchand College of Engineering, Sangli
   - o Practical demonstration and interactive workshop on popular HPC tools and platforms.
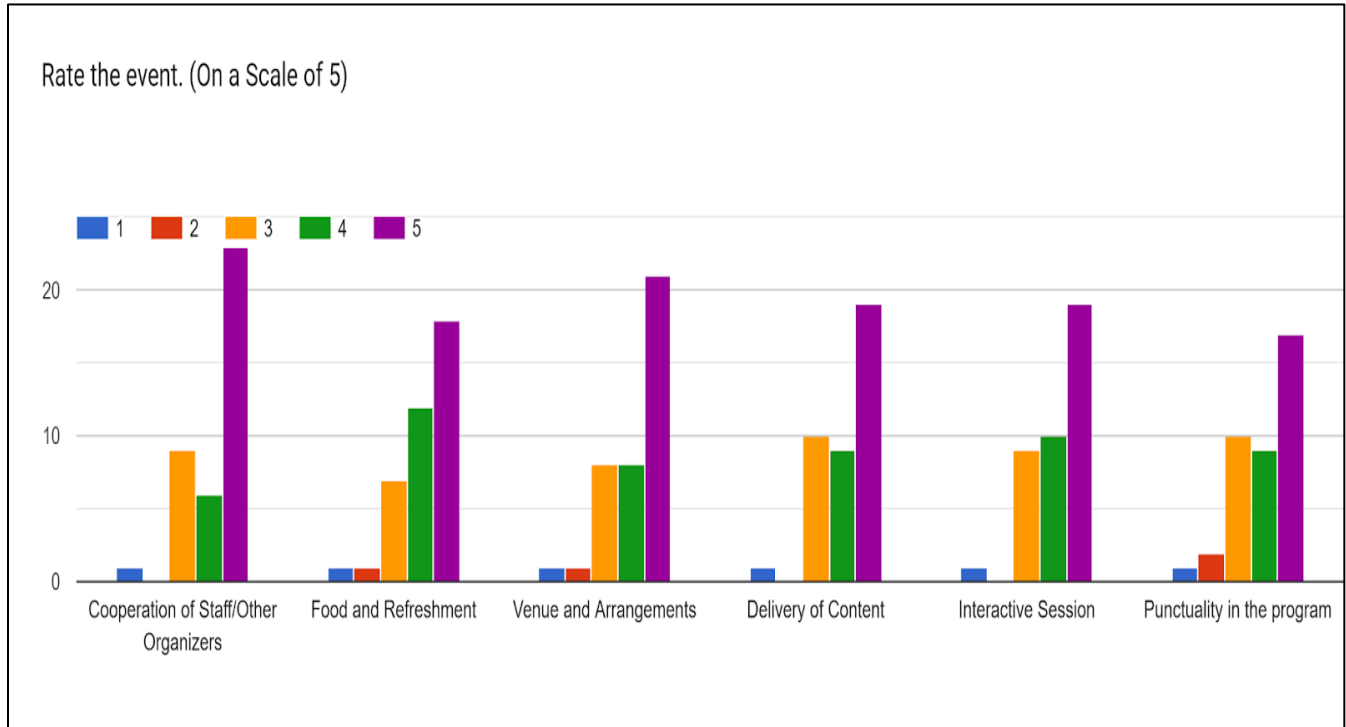
Guidance session by experts

The orientation program successfully enhanced participants' understanding of HPC's role in advancing academic and research excellence. The hands-on session provided practical exposure, enabling attendees to explore HPC applications in their respective domains. All the attendees enjoyed Breakfast and lunch provided by the host institute.

Working Lunch

Feedbacks:

Participants expressed high satisfaction with the content, delivery, and overall organization of the program. They highlighted the relevance of HPC in their academic and research endeavors and appreciated the initiative by both institutions and the National Supercomputing Mission.

Analysis of feedbacks received from attendees

The event received overwhelmingly positive feedback for its excellent organization, informative content, and exceptional hospitality. The sessions were highly regarded for being interactive and delivering clear, relevant, and innovative content, such as new concepts like MPI in AI and parallel computing. Resource persons were praised for their in-depth knowledge and effective delivery, with practical examples that enhanced understanding.

The event was meticulously planned, with well-coordinated logistics, including smooth scheduling and good food arrangements. Attendees appreciated the professionalism and cooperative nature of the staff, and the hospitality left a lasting impression. Overall, the event was a resounding success, with participants commending its seamless execution and valuable, insightful session. All the participants demanded for one-week FDP in hybrid mode on High-Performance Computing in Education and Research by host institute and agreed upon having HPC/AI in curriculum of the CS/IT branch.

Resource Persons, Coordinating Team with some of the Attendees

  The One-Day Faculty Orientation Program on "Empowering Academia: Integrating High-Performance Computing in Education and Research" served as a significant step towards bridging the gap between emerging technologies and academia. The event underscored the commitment of the organizing institutions to fostering innovation and excellence in education and research.

Dr. Shabina Modi   **Prof. Ganesh Dangat**

Mr. Aniruddha Kshirsagar   **Head of the Computer Science**

 Program Coordinators   **& Engg. Dept. KBPCOE Satara**