

**Parul**<sup>®</sup>  
University

Supercomputer  
Lab

# Supercomputer Lab Usage Policy



**Parul**<sup>®</sup>  
University

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## 1) Preamble

Parul University came into existence on April 21, 2015 under an Act of State Legislature viz., "Gujarat Private Universities Act, 2009" and "Gujarat Private Universities (Second Amendment) Act, 2015". Since establishment, the university has grown by leaps and bounds. Parul University offers more than 250 undergraduate, post graduate and doctoral degree programs through 35 institutions. It has a total of 28000 students which also include 2000 international students from 56 countries. The University is spread over a sprawling campus of 150+ acres accommodating 100 academic blocks. The university offers research programs in various disciplines such as Science, Engineering, Medical Sciences, Pharmacy, Ayurveda, Applied Sciences, Computer Applications, Management Studies, Homeopathy, Agriculture, Fine Arts, Commerce and Humanities.

In order to promote research and development programs GUJCOST has facilitated establishment of Supercomputer Facility PARAM Shavak developed by C-DAC at Parul University. This is a state-of-the-art computing facility in Deep Learning, Machine Learning and Artificial Intelligence. The Supercomputer platform offers end-to-end solution for high-performance computing /deep learning starting from latest hardware, GPU Accelerated software development environment, application support, training and tutorials to the young students and academic researchers who have innovative ideas to satisfy the needs of the end users.

This Supercomputer Facility is established at Parul University with an aim to provide computational resource with advanced technologies to perform high-end computations for scientific, engineering, and academic programmes to address and catalyse the research using modelling, simulations and data analysis. The system configuration is given as below:

### System Configuration :

<b>Processor</b>	◇————◇	<b>2-Intel® Xeon® Gold 6145 Processor (40 cores)</b>
<b>GPU</b>	◇————◇	<b>NVIDIA QUADRO RTX5000</b>
<b>RAM</b>	◇————◇	<b>96 GB</b>
<b>Hard disk</b>	◇————◇	<b>16 TB HDD</b>
<b>OS</b>	◇————◇	<b>Ubuntu 18.04.02 LTS</b>

## 2) Objective

This document sets forth the policy for the operation of the supercomputer system maintained and operated by the Supercomputer Lab and for selecting projects and operation methods for the system by the Lab.

## 3) Purpose of the Supercomputer system

The basic purpose of installing the System is to provide advanced level of scientific and technological computing facility for carrying out research and providing training to the users in various fields of science and technology.

To achieve this goal:

- Users must be fully aware of the purpose behind establishment of the System and should make every effort to carry out their research accordingly.
- The Supercomputer Facility should be utilized to the fullest extent to develop innovative projects/products/processes.
- The Supercomputer facility should be integrated into the UG/PG curricula wherever necessary.

## 4) User eligibility

Individuals from the categories listed below are eligible to use the System:

- Parul University employees and full-time personnel in equivalent positions who are engaged in research work or project work.
- A person, working in managerial capacity, who is not employed in the university but involved in research and development activity in the university, can use the supercomputer facility as per the requirements of the research work.
- Persons, other than those listed in (2) above, working as supervisors, PIs, Co-PIs, Team Leaders, Unit Leaders can use the system as per their requirements for carrying out research.

- An individual, whose participation in any research and development project under the collaboration with PU supervisor(s).
- An individual, other than those belonging to any of the four categories above, has to take permission from the Lab Manager to access the supercomputer facility.
- Lab can permit bonafide users to use supercomputer (carrying out research work in other GUJCOST sponsored projects or other projects of the institute or nearby institutes).

## 5) System operation

The Manager is responsible for endorsing System operation and to ensure that the operational guidelines stipulated by the Supercomputer Lab are followed and adhered to.

## 6) Access Request Applications

In order to access the Supercomputer facility:

- Individual(s) must appoint a Project Representative, as stipulated in the PU Supercomputer System Summary of Operations.
- The Project Representative must submit a project application filling up all the requisite details as required through the google form on <https://tinyurl.com/supercomputerlabto> to the Lab Manager.

## 7) Approval

Upon receipt of the application and completion of scrutiny by the Review Committee or the Lab Manager, the Lab will notify the Project Representative of the project and will issue user ID to the project representative to access the supercomputer.

## 8) Validity of User access

The validity of user access is limited to their project requirement and for new projects, individuals have to start the process requesting for access.

## 9) Prohibition of diversion of user ID & credentials

1. Users must manage their user ID, passwords and private keys securely and take adequate measures to prevent their fraudulent use.
2. Users are not allowed to use their project IDs and user IDs for any purpose other than that stipulated in Article 2. Allowing any third party to use allotted IDs is strictly forbidden.

## 10) Use of equipment and facilities

1. In carrying out their research for the purpose, System users may utilize Supercomputer facilities for requirements related to the research approved by the higher authorities.
2. Project supervisor, PI, Co-PI, Team Leader, Unit Leader, Research scholar have to record the usage in the logbook on a regular basis. This is mandatory because the Lab has to submit a copy of logbook and CPU usage summary to GUJCOST twice in a year.

## 11) Prohibited activities

Users are prohibited from using the System in any of the following ways:

- For any purpose other than the allocated research work.
- For any project other than that for which the user received approval from Supercomputer Lab according to the provisions of Article Approval.
- For any other use which violates security policies and guidelines of Supercomputer Lab.

## 12) Cancellation of eligibility

- The manager may suggest users to make improvements in their use of the System in case the manager feels that wrong/ inappropriate use may cause damage to supercomputer.
- When a user does not obey the guidelines as described above or when any of the five cases listed below applies to the user, the manager may cancel the user's System Registration or forbid the user from using the System.
  - a. When the user no longer meets the eligibility criteria given in Article User Eligibility.
  - b. When it is discovered that the user has diverted a project or user ID to a third party in violation of Article Prohibition of Diversion of User ID and Project ID.
  - c. When user indulges in any of the activities listed under Prohibited Activities
  - d. When user does not submit the report or fails to give the attributions stipulated in Article Submission of Reports.
  - e. When cancellation of eligibility is requested.

## 13) Submission of Research Results, Paper & Reports

- In all research papers published/presented or projects based on the application/usage of Supercomputer, the authors should mention acknowledgment of support in name of GUJCOST and Department of Science and Technology, Govt of Gujarat. The project coordinator has to submit a copy of such published papers to the Manager, Supercomputer Lab.
- Ownership of results using the System obtained through a user's initiative will reside with the user but they have to acknowledge GUJCOST in their report and have to submit one copy of the report to the Manager, Supercomputer Lab

- The Manager may request that users submit reports of their findings/results and procedures when using the System. When requested for submission of reports, users must submit a report to the Manager.

## 14) Cancellation of eligibility

1. Unless the user's consent is obtained, Supercomputer lab will keep all research-related and technical information strictly confidential (codes, data, system logs identifying the user)
2. For use in public presentations, Supercomputer Lab will be allowed to make use of projects details, user support data and operation data (data on system operation that is automatically generated) that has been processed to mask user identity.

## 15) Exclusion of liability

Supercomputer will strive to provide a stable environment for users, but will not guarantee that the System will continually to operate without fault, error and data loss. Supercomputer Lab will not be liable for any direct, indirect, incidental, special consequential or exemplary damages (including damages for loss of profits, goodwill use, or data to the users.

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