



# DR. HOMI BHABHA STATE UNIVERSITY



## THE INSTITUTE OF SCIENCE, MUMBAI



Sponsored by  
Anusandhan National Research Foundation  
ANRF( Formerly SERB)  
DST, Government of India

# National Conference on Data Science for Climate Resilience

5th - 7th December, 2024



### About University

Dr. Homi Bhabha State University (HBSU), established in 2019 by the Government of Maharashtra, is a pioneering Cluster University in Mumbai, incorporating the Institute of Science, Elphinstone College, Sydenham College, and others. As the Lead Institute, the Institute of Science, founded in 1920, joins these historic colleges, with Elphinstone College dating back to 1835. Operating under its own rules and aligned with Rashtriya Uchchar Shiksha Abhiyan (RUSA), HBSU aims to enhance higher education in the state by optimizing resources and providing a flexible, student-centered support system. It offers a diverse range of undergraduate and postgraduate programs through a Choice Based Credit System (CBCS), allowing students to select courses across colleges. With a focus on multidisciplinary education, skills development, and industry partnerships, HBSU maintains a reasonable fee structure while fostering a rich academic legacy.

### About the Institute

The Institute of Science, Mumbai, formerly known as the Royal Institute of Science (RIS) was established in 1920 by the Royal Charter. As an academic institution, the Institute has not only succeeded in setting and maintaining high standards of research and teaching, but has also provided an atmosphere congenial for the pursuit of Science. Education is a learning process and research is a process of expansion of ideas, which exist. The motto of the Institute, "It's good to seek out the causes of things", which has been followed over the years at the Institute. The Institute has been Alma Mater to a commanding array of outstanding industrialists and educationists, who have made their name in various walks of life.

### About the Department

The Department of Mathematics, among the oldest at The Institute of Science, carries a distinguished legacy shaped by influential leaders such as Dr. Masani and Prof. M. S. Huzurbazar, and is currently headed by Professor Selby Jose. The department offers two postgraduate programs: an M.Sc. in Mathematics and an M.Sc. in Data Science.

Launched in the 2021-2022 academic year to address the rising demand in data fields, the M.Sc. in Data Science program equips students with essential industry-relevant skills and knowledge across sectors like Finance, Marketing, Supply Chain, and Operations. The department is dedicated to fostering research excellence, promoting publications and participation in various workshops, webinars, and conferences. Annually, it hosts SIGMATICS, a National Mathematics Day outreach initiative to inspire interest in mathematics among school students. Committed to creating a vibrant learning environment, the department continually enhances the educational journey for its students

### About the Conference

Climate change presents profound challenges in the 21st century, impacting natural systems, economies and societies. The increasing frequency of extreme weather events, rising sea levels, and shifts in ecosystems necessitate innovative solutions. Traditional methods have proven inadequate, highlighting the growing importance of data science. Disciplines such as big data analytics, machine learning, and statistical modeling enable researchers to develop precise climate models, forecast extreme events, and identify previously unnoticed trends. The conference, "Data Science for Climate Resilience," aims to highlight advancements, encourage collaboration, and provide actionable insights to mitigate climate impacts.

### Objectives of the conference

- Facilitate panel discussions between the brightest minds of India from Academia as well as Industry to enlighten with the latest advancements & future prospects in the field of Data Science, Artificial Intelligence, Machine Learning & Generative AI.
- Create opportunities for interdisciplinary collaboration.
- Facilitate networking and knowledge exchange to build partnerships.
- Enhance the capacity of researchers, practitioners, and students through sessions on data science techniques and tools.

Organized by **Department of Mathematics and Data Science**



**CHIEF PATRON**  
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Hon. Vice Chancellor,  
Dr. Homi Bhabha State  
University,  
Mumbai.

**PATRON**  
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The Institute of Science,  
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Department of Mathematics,  
The Institute of Science,  
Mumbai.

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- Prof. Ravi A. Rao, Ex Dean, Tata Institute of Fundamental Research, Mumbai
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- Dr. Rajesh Raut (Associate Professor)
- Dr. Vikash Bangade (Assistant Professor)
- Dr. Shubhangi Patil (Assistant Professor)

**Call for Papers:**  
We invite research papers for presentation at the conference. Abstracts should be submitted at the time of registration, while full papers may be sent to: [dsc2024@iscm.ac.in](mailto:dsc2024@iscm.ac.in). Selected abstracts will be included in the Pre-conference Proceedings, and accepted full papers will be published in an ISBN-indexed book or a reputed journal.  
The best abstract and best full paper will also be awarded with a handsome prize.  
The participants whose abstracts and full papers are selected for presentation at the conference will receive special certificates. All delegates attending the conference will also receive standard participation certificates.  
The topic for research papers focused on, the application of advanced technologies - such as Artificial Intelligence (AI), Machine Learning (ML), Big Data, and Social Media Networks - across domains including Climate Resilience, Healthcare, Production, Business, Finance and Ethics.

**Suggested topics include, but are not limited to**

- Big Data Analytics in Climate Studies/ Healthcare
- AI and ML for Climatic Resilience
- Remote Sensing and Environmental Monitoring
- Future Technologies in Climate Data Science
- Ethics and Equity in Climate Data Science
- Social Media Analytics for Business Insights

**For the Registration of Conference**

- Only participation: [Register Here](#)
- Participation with Paper Presentation: [Register Here](#)

Registration Fee	
UG/PG Student	Rs. 500/-
Ph.D Student	Rs. 1000/-
Research Fellow	Rs. 2000/-
Teaching Faculty	Rs. 3000/-
Industry Professional	Rs. 4000/-

(Please remember to bring your College, University, or Organization **ID card for verification**)  
You can also find the link for registration on [www.hbsu.ac.in](http://www.hbsu.ac.in) and [www.iscm.ac.in](http://www.iscm.ac.in)

**Account Details:**  
A/c Holder: Finance and Accounts officer, HBSU (SERB)  
IFSC Code: SBIN0004205                      A/c No.: 43378209980  
Bank Name: State Bank of India      Branch Code: 004205



# Conference Program Outline

## *Dates: 05-07 December 2024*

### **05-06 DECEMBER 2024 — EXPERT SESSIONS AND PANEL DISCUSSIONS**

- **Keynote Address:** Opening sessions with keynote speakers to set the stage.
- **Expert Talks:** Presentations on the application of advanced data technologies across various sectors:
  1. Climate Resilience
  2. Healthcare
  3. Business and Finance
- **Panel Discussions:** Each day will conclude with a panel discussion, offering in-depth analysis of the topics presented and engaging with audience questions.



### **07 DECEMBER 2024 — INTELLIDATOS FEST**

- **Keynote Address:** Inspiring talks designed to motivate and guide aspiring data scientists.
- **Competitions**
  1. **Project Presentation Competition:** A platform for students to present their data science projects and innovations.
  2. **Data Visualization Challenge:** Participants showcase their skills in data visualization using PowerBI.
  3. **Predictive Analytics Challenge:** A competition focused on predictive modeling and analytics skills.
- **Concluding Panel Discussion** Topics include:
  1. Career opportunities within Data Science programs
  2. Industry placement prospects
  3. Pathways for emerging professionals in data science



#### **General Information:**

- Breakfast, lunch and high tea will be provided at the conference venue.
- The participants will have to bear the cost of accommodation however we will assist to get rooms in nearby hotels.
- Registered participants will receive the conference schedule and other details via their registered email.

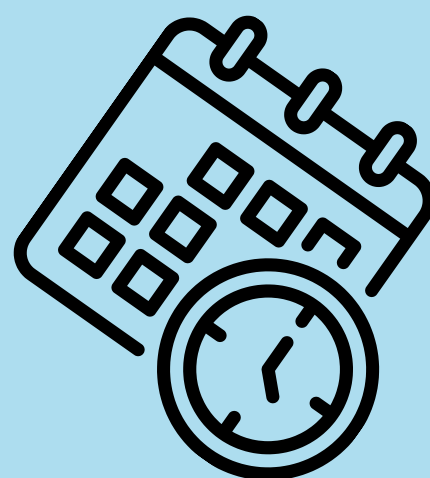
#### **Registration:**

For participation in IntelliDatos Fest:  
**[Register Here](#)**



#### **Important Dates:**

Registration deadline: 20 November, 2024  
Abstract Submission: 20 November, 2024  
Abstract Acceptance: 27 November, 2024  
Full Paper Submission: 30 November, 2024



**We are looking forward to your participation and we appreciate your efforts in contributing to the success of the event. You are requested to share this information with your contacts for wider publicity.**

*IntelliDatos Fest is crafted to inspire and equip students with practical insights for their future careers in data science.*