

PReMI'23: Program in Detail

09:00 - 10:00 Registration **Venue: Ground Floor, PJAB**

10:00 - 12:00 Tutorial
Title: *Matching Across Domains Using Limited Data*
Speaker: *Soma Biswas, Indian Institute of Science Bangalore*
Chair: *Pabitra Mitra, IIT Kharagpur*
Venue: *PJAB*

12:00 - 12:30 Tea/Coffee Break

12:30 - 14:30 Tutorial
Title: *AI and Ethics*
Speaker: *Animesh Mukherjee, IIT Kharagpur*
Chair: *Swapna Agarwal, TCS Research Lab, Kolkata*
Venue: *PJAB*

14:30 - 15:30 Lunch Break

15:30 - 17:30 Tutorial
Title: *On Learning Useful Skills by Exploring Real Environments*
Speaker: *Anirban Santara, Google Research India*
Chair: *Dinabandhu Bhandari, HIT Kolkata*
Venue: *NABI*

Title: *Unveiling the Code of Neuronal Activation Patterns*
Speaker: *Sangheeta Roy, TCS Research Lab, Kolkata*
Chair: *Raghunath Chatterjee, ISI Kolkata*
Venue: *PJAB*

18:00 - 18:30 Tea/Coffee Break

18:30 - 19:30 Cultural Program: *BONDI-JUGOL* **Venue: PJAB**

19:30 - 21:00 Welcome Dinner **Venue: Guest House**

PJAB: Auditorium of Platinum Jubilee Academic Building

NAB1: Auditorium 1 of New Academic Building

NAB2: Auditorium 2 of New Academic Building

Day 0: Monday, December 11, 2023

PReMI'23: Program in Detail

Day 1: Tuesday, December 12, 2023

09:00 - 10:00	Registration		Venue: <i>Ground Floor, PJAB</i>
10:00 - 10:30	Inauguration	<p><i>Welcome Address by Program Chair</i></p> <p><i>About PReMI'23 by Conference Chair</i></p> <p><i>History and Legacy of PReMI by Honorary Chair</i></p> <p><i>General Address by Director, ISI</i></p> <p><i>General Address by Chief Guest</i></p> <p><i>Vote of Thanks by Organizing Chair</i></p>	Venue: <i>PJAB</i>
10:30 - 11:00	High Tea/Coffee Break		
11:00 - 12:00	Keynote Talk	<p>Title: <i>Statistical Learning with Sparsity</i></p> <p>Speaker: <i>Trevor Hastie, Stanford University, USA</i></p> <p>Chair: <i>Probal Chaudhuri, ISI Kolkata</i></p> <p>Venue: <i>PJAB</i></p>	
12:05 - 12:50	Invited Talk	<p>Title: <i>Adventures and Impact of AI in Face Recognition and Deepfakes</i></p> <p>Speaker: <i>Richa Singh, IIT Jodhpur</i></p> <p>Chair: <i>Bhabatosh Chanda, IIIT Kalyani</i></p> <p>Venue: <i>PJAB</i></p>	
12:50 - 14:00	Lunch Break		
14:00 - 16:00	Technical Session	<p>TS01: Pattern Recognition</p> <p>Chair: <i>Amita Pal, ISI Kolkata</i></p> <p>Paper ID: 007, 087, 109, 120, 143, 169</p> <p>TS02: Machine Learning</p> <p>Chair: <i>Anil K. Ghosh, ISI Kolkata</i></p> <p>Paper ID: 003, 024, 027, 105, 277, 298</p> <p>TS03: Deep Learning</p> <p>Chair: <i>Smarajit Bose, ISI Kolkata</i></p> <p>Paper ID: 123, 136, 161, 251, 259, 286</p>	<p>Venue: <i>PJAB</i></p> <p>Venue: <i>NAB1</i></p> <p>Venue: <i>NAB2</i></p>
16:00 - 16:30	Tea/Coffee Break		
16:30 - 17:30	Keynote Talk	<p>Title: <i>Symbolic, Statistical and Causal AI</i></p> <p>Speaker: <i>Bernhard Schölkopf, Max Planck Institute for Intelligent Systems, Germany</i></p> <p>Chair: <i>Arup Bose, ISI Kolkata</i></p> <p>Venue: <i>PJAB</i></p>	
17:35 - 18:35	IAPR Public Lecture	<p>Title: <i>India's first Solar Space observatory: Aditya L1 and scope of AI</i></p> <p>Speaker: <i>Dipankar Banerjee, Aryabhata Research Institute of Observational Sciences, India</i></p> <p>Chair: <i>Supratik Pal, ISI Kolkata</i></p> <p>Venue: <i>PJAB</i></p>	

PReMI'23: Program in Detail

Day 2: Wednesday, December 13, 2023

09:00 - 10:00	Registration	Venue: <i>Ground Floor, PJAB</i>
10:00 - 12:00	Technical Session TS04: Statistical Learning	Venue: <i>NAB1</i>
	Chair: <i>Sukhendu Das, IIT Madras</i>	
	Paper ID: 151, 156, 160, 201, 221, 302	
	TS05: Cognitive Computing	Venue: <i>PJAB</i>
	Chair: <i>Partha Bhowmick, IIT Kharagpur</i>	
	Paper ID: 026, 057, 134, 148, 174, 306	
	TS06: Computational Intelligence	Venue: <i>NAB2</i>
	Chair: <i>Ananda M. Mondal, FIU, USA</i>	
	Paper ID: 054, 055, 146, 178, 203, 208	
12:00 - 12:30	Tea/Coffee Break	
12:30 - 13:30	Keynote Talk	Title: <i>Progress in Learning to Simplify Ultrasound</i>
		Speaker: <i>Alison Noble, University of Oxford, UK</i>
		Chair: <i>Malay K. Kundu, ISI Kolkata</i>
		Venue: <i>PJAB</i>
13:30 - 14:45	Lunch Break	
14:45 - 15:30	Invited Talk	Title: <i>Improving Machine Vision using Insights from Neuroscience</i>
		Speaker: <i>SP Arun, Indian Institute of Science Bangalore</i>
		Chair: <i>Dipti Prasad Mukherjee, ISI Kolkata</i>
		Venue: <i>PJAB</i>
15:30 - 16:00	Tea/Coffee Break	
16:00 - 18:20	Technical Session TS07: Medical Imaging	Venue: <i>NAB2</i>
	Chair: <i>Jaya Sil, IIST Shibpur</i>	
	Paper ID: 059, 118, 129, 159, 163, 192, 307	
	TS08: Image and Video Processing	Venue: <i>NAB1</i>
	Chair: <i>Ananda Chowdhury, Jadavpur University</i>	
	Paper ID: 018, 093, 121, 158, 191, 200, 280	
	TS09: Computer Vision	Venue: <i>PJAB</i>
	Chair: <i>Amlan Chakrabarti, University of Calcutta</i>	
	Paper ID: 041, 083, 104, 110, 111, 175, 264	
19:00 - 20:00	Cultural Program: SAROD SISTERS	Venue: <i>PJAB</i>
20:00 - 22:00	Banquet	Venue: <i>Guest House</i>

PReMI'23: Program in Detail

09:00 - 10:00 **Registration** **Venue:** *Ground Floor, PJAB*

10:00 - 12:00 **Technical Session** **TS10: Soft Computing** **Venue:** *NAB2*

Chair: *Vasilii A. Gromov, HSE, Russia*

Paper ID: 011, 022, 082, 092, 140, 231

TS11: Information Security **Venue:** *NAB1*

Chair: *Nabendu Chaki, University of Calcutta*

Paper ID: 012, 016, 035, 091, 095, 173

TS12: Signal Processing **Venue:** *PJAB*

Chair: *Swagatam Das, ISI Kolkata*

Paper ID: 020, 025, 097, 126, 128, 147, 152

12:00 - 12:30 **Tea/Coffee Break**

12:30 - 13:30 **Keynote Talk** **Title:** *More Is Different - Beyond Wittgenstein's Philosophy*

Speaker: *Dacheng Tao, University of Sydney, Australia*

Chair: *Bidyut B. Chaudhuri, TIU Kolkata*

Venue: *PJAB*

13:30 - 14:45 **Lunch Break**

14:45 - 15:30 **Invited Talk** **Title:** *Reinforcement Learning with Structured Actions and Policies*

Speaker: *Balaraman Ravindran, IIT Madras*

Chair: *Bhargab B. Bhattacharya, ISI Kolkata*

Venue: *PJAB*

15:30 - 16:30 **Industrial Session** **Presentation by Sponsoring Organizations** **Venue:** *PJAB*

Chair: *Utpal Garain, ISI Kolkata*

16:30 - 18:30 **Doctoral Colloquium** **Presentation by Doctoral Candidates** **Venue:** *PJAB*

Chair: *Tanmay Basu, IISER Bhopal*

Day 3: Thursday, December 14, 2023

PReMI'23: Program in Detail

09:00 - 10:00 Registration **Venue: Ground Floor, PJAB**

10:00 - 11:40 Technical Session **TS13: Computational Neurology** **Venue: NAB1**
Chair: Amitava Chatterjee, Jadavpur University
Paper ID: 005, 108, 162, 207, 299

TS14: Biometrics **Venue: PJAB**
Chair: Hemant A. Patil, DA-IICT, Gujarat
Paper ID: 008, 135, 180, 217, 266

TS15: Bioinformatics **Venue: NAB2**
Chair: Sudipto Saha, Bose Institute, Kolkata
Paper ID: 182, 210, 249, 276, 283

11:40 - 12:10 Tea/Coffee Break

12:10 - 12:55 Invited Talk **Title: Convex Optimization: Tools and Applications in Statistics and Data Science**
Speaker: Balasubramanian Narasimhan, Stanford University
Chair: Biswabrata Pradhan, ISI Kolkata
Venue: PJAB

13:00 - 13:45 Invited Talk **Title: Computer-Aided Healthcare in Era of Artificial Intelligence**
Speaker: Gajendra P. S. Raghava, IIIT, New Delhi
Chair: Pinakpani Chakrabarti, Bose Institute, Kolkata
Venue: PJAB

13:45 - 14:45 Lunch Break

14:45 - 16:45 Student Research Workshop **Poster Presentation by Students / Research Scholars** **Venue: NAB2**

Chair: Angshuman Paul, IIT Jodhpur

16:45 - 17:15 High Tea/Coffee Break

17:15 - 18:00 Valedictory **Prize Distribution** **Venue: NAB1**
Feedback from the Participants
Concluding Remarks by Head, MIU

Day 4: Friday, December 15, 2023