

# A Conclave on Data Science & Artificial Intelligence

**October 27<sup>th</sup>, 2018**

## Organizing Committee

Prof. Subhasis Chaudhuri  
Prof. Sunita Sarawagi  
Prof. Shivaram Kalyanakrishnan  
Prof. Manoj Gopalkrishnan

## Workshop Management

IITB Research Park Foundation

## Contact Details

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## Programme Schedule

Time (Hrs.)	Programme
<b>8:30 – 9:00</b>	Registration with breakfast @ VENUE: Meluha – the Fern, Hiranandani Gardens, Powai
<b>9:00 – 9:10</b>	Welcome address Prof. Subhasis Chaudhuri Former Deputy Director, IIT Bombay
<b>9:10 – 9:20</b>	IITB Research Park Overview Prof. Rajesh Zele Professor-In-Charge, IITB Research Park Foundation
<b>9:20 – 9:35</b>	Talk by the Chief Guest Dr. Anil Kakodkar Former Director, Bhabha Atomic Research Centre (BARC)
<b>9:35 – 9:55</b>	Keynote by Prof. Sunita Sarawagi Department of Computer Science and Engineering, IIT Bombay <b>Title:</b> The Frontiers of Machine Learning Chair: Ms. M. Kameshwari
<b>9:55 – 10:15</b>	Keynote by Dr. Shivkumar Kalyanaraman Executive Leader, Digital Renewables Innovations, GE Power Conversion <b>Title:</b> Data Science and Industrial IoT, Industry 4.0 and Renewable Energy Chair: Prof. Sunita Sarawagi
<b>10:15 – 11:15</b>	<b>Technical Session 1 - Machine Perception</b> Session Chair: Prof. Amit Sethi Department of Electrical Engineering, IIT Bombay  <b>Talk by Prof. Amit Sethi</b> <b>Title:</b> Cancer detection and beyond in gigapixel pathology images  <b>Talk by Dr. Sujoy Kar, CMIO, Apollo Hospitals</b>

	<p><b>Title:</b> AI-based cardiac risk score by Apollo Hospitals and Microsoft</p> <p><b>Talk</b> by Prof. Biplab Banerjee, Department of Electrical Engineering, IIT Bombay  <b>Title:</b> Image representation for few-shot learning, image retrieval, human action recognition, and satellite image analysis</p> <p><b>Talk</b> by Prof. Animesh Kumar, Department of Electrical Engineering, IIT Bombay  <b>Title:</b> Towards Data-Driven Sensing with a Location Unaware Mobile Sensor</p> <p><b>Talk</b> by Prof. Suyash Awate, Department of Computer Science and Engineering, IIT Bombay  <b>Title:</b> Medical Image Computing</p> <p><b>Talk</b> by Prof. Ajit Rajwade, Department of Computer Science and Engineering, IIT Bombay  <b>Title:</b> Compressed Sensing for Medical Image Acquisition</p> <p><b>Talk</b> by Prof. Rajbabu Velmurugan, Department of Electrical Engineering, IIT Bombay  <b>Title:</b> Machine Learning Applications in Video, Audio, and Speech Signal Processing</p>
<b>11:15 – 11:45</b>	Tea Break
<b>11:45 - 12:00</b>	<p>Short Talks by Industry</p> <p><b>Talk</b> by <b>Flytxt</b> - Dr. Rahul Vyas, Head - Data Sciences Practice  <b>Title:</b> Customer Analytics: Machine Learning (ML) to Artificial Intelligence (AI)</p> <p><b>Talk</b> by <b>Cognizant</b> – Mr. Prashant Achanta, Research Partner and head of APAC Research engagements  <b>Title:</b> Enabling capability build out with research. Focus on software engineering &amp; automation</p> <p>Chair: Ms. M. Kameshwari</p>
<b>12:00 - 13:00</b>	<p><b>Technical Session 2</b> - Language and Text  Session Chair: Prof. Ganesh Ramakrishnan  Department of Computer Science and Engineering, IIT Bombay</p> <p><b>Talk</b> by Prof. Pushpak Bhattacharyya  Director, IIT Patna and Professor, Department of Computer Science &amp; Engineering, IIT Bombay  <b>Title:</b> The Sentimental Computer</p>

	<p><b>Talk</b> by Dr. Karthik Sankaranarayanan Senior Research Scientist in Artificial Intelligence at IBM Research <b>Title:</b> AI for Industries and Open Challenges with Language and Text</p> <p><b>Talk</b> by Dr. Ashish Tendulkar Machine learning and Text Mining Specialist, Google <b>Title:</b> Fifteen India specific Text Analytics and Machine Learning Problems</p> <p><b>Talk</b> by Prof. S. Sudarshan Department of Computer Science &amp; Engineering, IIT Bombay <b>Title:</b> Fake news detection</p> <p><b>Talk</b> by Prof. Ganesh Ramakrishnan Department of Computer Science and Engineering, IIT Bombay <b>Title:</b> Insights from two sequence-to-sequence modeling experiences: Automatic Question Generation and Text recognition in images</p>
<b>13:00 - 14:00</b>	Lunch
<b>14:00 - 14:20</b>	<p><b>Talk</b> by Dr. Sanghamitra Bandyopadhyay Director, Indian Statistical Institute, Kolkata Chair: Prof. Subhasis Chaudhuri</p>
<b>14:20 - 15:20</b>	<p><b>Technical Session 3</b> - Predictive Analytics Session Chair: Prof. Manoj Gopalkrishnan Department of Electrical Engineering, IIT Bombay</p> <p><b>Talk</b> by Prof. V. S. Borkar Department of Electrical Engineering, IIT Bombay <b>Title:</b> Getting around in a networked world</p> <p><b>Talk</b> by Mr. Mahesh Madiyala, Director, Flipkart <b>Title:</b> Data Science for Demand Planning for E-commerce</p> <p><b>Panel Discussion</b> <b>Title:</b> Predictive Analytics <b>Panelists:</b></p> <ol style="list-style-type: none"> <li>1. Prof. Ravindra Gudi Department of Chemical Engineering, IIT Bombay</li> <li>2. Prof. Nikhil Karamchandani, Department of Electrical Engineering, IIT Bombay</li> <li>3. Mr. Pravesh Kriplani, IDFC Asset Management, Fund Manager</li> <li>4. Mr. Rahul Fokane, Associate Partner, ZS</li> <li>5. Dr. Subhojit Basu, Sr. Engineering Manager, Ola</li> </ol>
<b>15:20 - 15:45</b>	Tea Break

<b>15:45 – 16:45</b>	<p><b>Technical Session 4</b> - Decision Making  Session Chair: Prof. Shivaram Kalyanakrishnan  Department of Computer Science and Engineering,  IIT Bombay</p> <p><b>Talk</b> by Prof. Shivaram Kalyanakrishnan  <b>Title:</b> Decision Making</p> <p><b>Talk</b> by Prof. Manjesh Hanawal,  Inter Disciplinary Program in Industrial Engineering and  Operations Research, IIT Bombay  <b>Title:</b> Online Decision-Making in Uncertain Environments</p> <p><b>Talk</b> by Prof. Ankur Kulkarni,  Inter Disciplinary Program in Systems and Control  Engineering, IIT Bombay  <b>Title:</b> Regulating High Frequency Trading in the Indian  Securities Market: Quantitative Approach using Agent-  based Modeling</p> <p><b>Talk</b> by Dr. Harshad Khadilkar, Scientist,  TCS Research  <b>Title:</b> Practical Reinforcement Learning for Managing  Industrial Operations</p> <p><b>Talk</b> by Dr. Bala Vamsi Tatavarthy, Senior Adviser, Ocean  Dial  <b>Title:</b> Scope for AI/ML in Investment Management</p>
<b>16:45 – 17:25</b>	<p><b>Panel Discussion</b> on “<b>AcademiaIndustry Together</b>”  Moderator: Prof. Swaroop Ganguly  Department of Electrical Engineering, IIT Bombay</p> <p>Panelists:</p> <ol style="list-style-type: none"> <li>1. Prof. Subhasis Chaudhuri, Department of  Electrical Engineering, IIT Bombay</li> <li>2. Prof. Asim Tewari, Department of Mechanical  Engineering, IIT Bombay</li> <li>3. Dr. P Anandan, CEO, Wadhwani centre for AI</li> <li>4. Dr. Raghavan Muralidharan, CTO, Tata Power SED</li> <li>5. Mr. Ganesh Mahabala, Business Head -  Supercomputing, South Asia, NVIDIA</li> <li>6. Mr. Kaushik Mukherjee, Sr. Director &amp; Head of  Engineering, Flipkart</li> </ol>
<b>17:25 – 17:30</b>	Vote of Thanks
<b>17:30 - 18:30</b>	Networking and High Tea on Terrace