



# Techfest 2020

## IIT Bombay

Report by Dr. Rajiv Joshi  
in association with the Techfest  
Management

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Special Acknowledgement from Techfest:

Techfest IIT Bombay has a clear vision of instilling in the young minds of the country, a thirst for questioning and exploring the world around them and techfest management is always happy to partner with firms that share the techfest vision. The management and volunteers whole heartedly thank IEEE Circuits and Systems Society for associating with the techfest to carry forward that dream.

Support from following Techfest Members and CAS booth support is well appreciated.

Techfest Management: Pranav Das, Naman Agarwal, Vasundhara Sontakke, Sahil Dixit.

CAS booth volunteers: Prof. Pramod Murali, Debtanu Mukherjee, Mangesh Mukund Malgi, Kilari Pardhasardi, Sachin Doifode Shantaram, Yash Pratap Singh Tomar, Krishna Khairnar, Utkarsh Upadhyaya, Abbas Taher Barwaniwala, Saurabh Nitin Thakur, Yaswanth Chebrolu

# Brief Overview of Techfest IIT Bombay

Under the patronage of **UNESCO, UNICEF** and Digital India, Techfest, IIT Bombay is established as **Asia's Largest Science and Technology Festival** with a footfall of **175,000+ people**. We have an outreach across **2500 Indian colleges** and over **3.1 Million** Facebook followers. This year Techfest was conducted on the **3rd,4th and 5th of January, 2020**.

Techfest hosts a series of key talks throughout the year and during the event which sees participation in huge numbers. Over the years, **Techfest has witnessed Global Icons, Nobel Laureates, Industry experts, Public figures** etc from across the globe like **Dalai Lama, Bjarne Stroustrup, Dr. A P J Abdul Kalam, Prof. Eric S Maskin and many others** coming in to share their wisdom with our community here at Techfest. We also host an **International Expo** wherein we bring the latest technology in the world and showcase it here. We've had **Sophia (the first humanoid robot to get citizenship in a country), RoboThespian, , the Einstein Robot,** etc over the past years.

Apart from all this, we host over **200+ events and workshops across 6 major cities** making it a nation-wide competition that all students look forward to participate in. Apart from this, we also have international teams participating in competitions like **RoboWars and Micro-Mouse**.

We at Techfest, also feel socially responsible and periodically hosts events like **Bolt (Free Bone Health Checkup for the elderly), I-Understand ( Financial literacy drive) , Cyclothon (to spread awareness about environmental pollution and need for greener alternatives)** etc.

Link to Techfest Website: <https://techfest.org/>

Link to Facebook page: <https://www.facebook.com/iitbombaytechfest/>

Link to Official Aftermovie 2018: <https://www.youtube.com/watch?v=jZt53MjhiX4>

## Techfest Moments:



Acting humanoid Robo-Thespian performs (left) and Sophia first humanoid robot (right)



Diginitories at Techfest – Right : Late Dr. A. P. J. Abdul Kalam (President of India)



Noble prize winner delivering a lecture (left) and his holiness Dalai Lama (right)

## Meshmerize: 2019-20

Meshmerize is one of the oldest competitions in the history of the fest wherein the participating teams have to create an **autonomous line following bot racing to decipher a maze. This competition was proudly sponsored by CAS.**

All competitions that Techfest conducts, especially Meshmerize, are very well publicized and known of in Indian engineering colleges, hence attracting participation in large numbers. With the aim of creating a platform for technical enthusiasts across the country to participate and showcase their calibre, **the zonals were conducted in 6 major cities of India and a couple of International locations like Nepal and Madagascar.** Winners from each zone then competed in the finale of the competition which was held in the fest. A wildcard round was also conducted during the fest, top teams from which also competed in the finale. A total of about **500-700 teams** competed in the competition, leading to a display of great skill and knowledge, and tough competition. Each team had a maximum of **4 participants. The total prize money for this competition was INR 82,500.**

The competition involves bots which follow white lines on an arena maze as paths and try to finish as fast as possible. There are 2 runs involved, the Dry Run and the Final Run. The purpose of the Dry Run is for the bot to explore the maze as much as

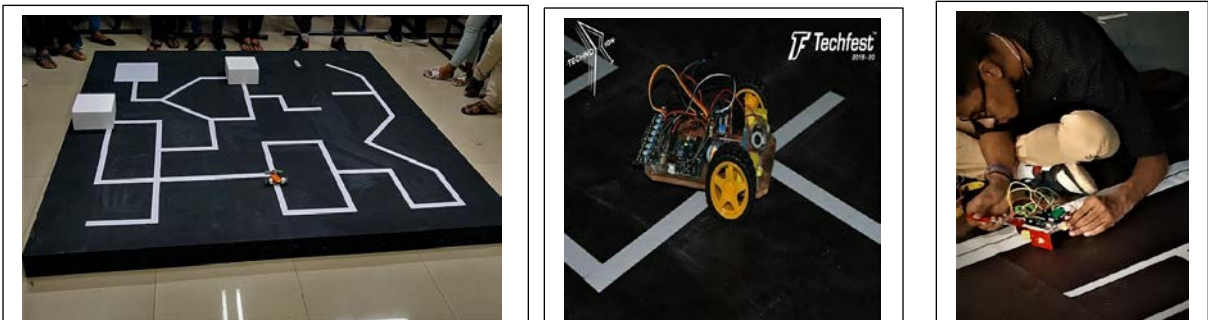
possible. In the Final Run, the bot tries to get to the end as quickly as possible and ideally taking the shortest path. Most of the bots are specifically coded for this.

Winners were declared through an elaborate point system, which depends upon various factors such as checkpoints on the arena, time taken for the Dry and Final Runs and others.

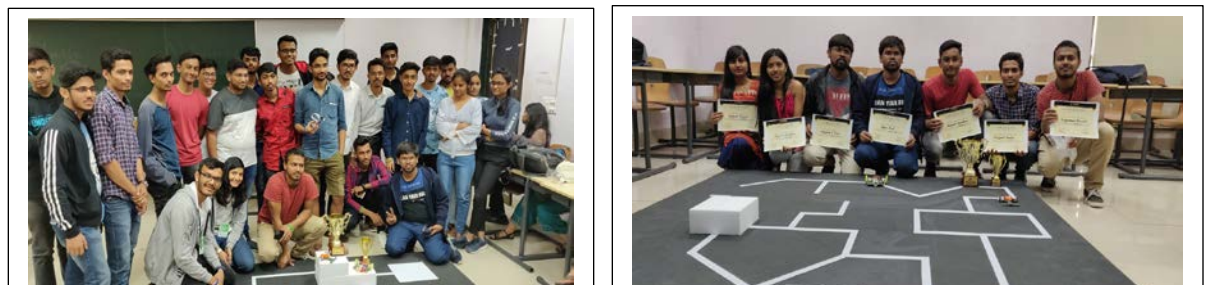
This year witnessed tough competition for the top spots with **the winning team's bot finishing under 15secs.**

Link to video of the winning bot: [https://drive.google.com/file/d/1JBku0Z5bG3G\\_Djg-OihaEj6AhehnNCmV/view?usp=sharing](https://drive.google.com/file/d/1JBku0Z5bG3G_Djg-OihaEj6AhehnNCmV/view?usp=sharing)

### Meshmerize Photo Gallery:



Techfest competition: robot has to travel Fastest and be on the white lines. Middle photo: Robot and right: making sure the robot stays on line



Left: Techfest competition finalist and right: side winners

## International Industry 4.0 Summit

The Techfest International Summit is **India's leading conference gathering of senior level executives** from the Indian industry as well as abroad interested in developing their digital strategies.

The main topics of discussion for this year's summit was **Smart manufacturing, Clean and Smart mobility, AI, ML and Data Analytics** boosting industrial growth.

We had a total of **14 keynote speakers+ 8 panelists** from academia and industry enlightening our **200+ attendees** consisting of students and working professionals. **Networking sessions** with the guests was held to help students first hand information about the working world. Dr. Rajiv Joshi from IBM gave a keynote related AI Compute – Pervasive to emerging. It was very well received by the audience.



Keynote talk by Dr. Rajiv Joshi to well attended audience.

## CAS- IEEE Activity Kiosk:

CAS for the first time hosted a Kiosk in the techfest which turned out to be a great success. Overall there were over 150K folks moving around the event over span of 3 days. The crowd consisted of professionals, industry folks, university professors, students and high school kids. Many high school kids poured in to learn from techfest.

The idea of hosting CAS booth in techfest was unique and was achieved through the excellent support (Appropriate CAS gift items, banners and mementos for the volunteers) and guidance from the CAS manager Brittan Parkinson.

The location of the CAS booth was across the main auditorium and near the crowded area and could attract the audience. The CAS booth was managed by able and enthusiastic volunteers provided by Prof. Pramod Murali (CAS member and EE Dept IIT Bombay). IEEE CAS volunteers emphasized the need for joining the society to high school kids and its great work for humanitarian causes.

The techfest success story is captured through colorful pictures. Here are some pictures of CAS event.



CAS booth and enthusiastic CAS booth volunteers with Dr. Rajiv Joshi (CAS BOG) far right.



Hustle and bustle at the CAS booth. Visitors trying to get info from CAS booth and its volunteers.



Left: Crowded CAS booth. Right: Young and old at CAS Stall and the energetic crowd attending