



Institute of Defence Scientists & Technologists and



Research and Development Estt. (Engrs) presents

CATS-2024

(Conclave on Autonomous Technology and Systems)



<u>Date</u>: 11-12 Jan 2024

<u>Venue</u>: Dr. APJ Abdul Kalam DRDO Golden

Jubilee Auditorium, Pashan, Pune.

CATS-2024

The Conclave would strive to provide the following two objectives necessary for Autonomous System development.

The Conclave on Autonomous Technology and Systems (CATS-2024) is brought to you by the IDST and R&DE (Engrs), DRDO, Pune. The Conclave shall act as a catalyst for bringing together the various stakeholders involved in development of this niche technology.

Technological advancements in Drones, Autonomous Air, Ground, Surface and Underwater Vehicles are accelerating at a fast pace over the recent years. The world is witnessing the use of unmanned systems for Security, Reconnaissance, Agriculture, Surveying, Object delivery, Filming and a plethora of new applications, ultimately leading to personal mobility crafts. These systems provide the inherent advantage of being autonomous and hence providing the advantage of speed of usage, safety and security.

Development of any autonomous system is multidisciplinary in nature with teams having the following skill sets of capabilities working in unison:

Industrial Product Designers, Robotics, Mechanical, Electrical, Electronics, Control, Communications, Vision, Instrumentation Engineers conceptualizing the systems. The Software teams from Edge computing, Embedded Systems, Human Machine Interface, Artificial Intelligence and Machine Learning etc. thereafter develop the algorithms and processes which transform these machines to smart and autonomous systems capable of self-learning and unaided decision making.

As this is a nascent area of research and development, it is necessary to nurture innovations in every aspect of development such that the product would be unique. In this scenario therefore, it is essential that the developer and manufacturer should be collaborating and innovating continuously to stay ahead. CATS-2024 will address issues by researcher, academecians and manufacturer for evolving a cohesive approach for the Autonomous System development.

A] Provide a platform for the designers, developers and manufacturers from different parts of the country to come together to be cognizant with current state-of-the-art and carry out focused interactions amongst the delegates.

CATS-2024

B] An exhibition by industry partners showcasing their products, components and solutions in various technology domains.

The Conclave shall be bringing together the expert brains and the brawns of the autonomous systems on single platform and providing the stimulus for enhancing innovation.

The key features during the Conclave would be:

- Invited talks by prominent personnel in autonomous systems design and manufacturing
- Talks by Users from the Services, Paramilitary, Disaster Management etc. to elaborate on the usage of autonomous systems
- Presentation by designers from national research organization like DRDO, ISRO, BARC, CDAC, CSIR, NIO, NIOT etc. to bring forward their needs and aspirations
- Talks by prominent Academicians carrying out research in this domain
- Presentation by Industry participants providing a glimpses of available technology and capabilities so that there could be **B to C and B to B** interaction
- Providing an insight on Skill Development in the areas of their manufacture and usage.



Registration charges:

Delegate: Rs. 6,000/-Student: Rs. 3,000/-

Last date for registration:

25 Dec. 2023

Payment:

Online -

Bank Name: Punjab National Bank, Pashan

A/c Name: IDST, Pune A/c No.: 0495000100142936 IFSC Code: PUNB0049500

DD/Multi-city Cheque -

To be drawn in favour of IDST,Pune. Payable at Pune. Address: IDST, Pune branch, L-35 DSC Lines, Pashan 411021.

Organising Committee

Dr. Makarand G. Joshi, Director, R&DE(E) Shri. D. P. Rao, President, IDST Dr. C. L. Dhamejani, Ex. President, IDST Shri. K. C. Arora, Ex. President, IDST Dr. D. B. Sarwade, Chairman, IDST, Pune Shri. B. S. Gugale, Member, IDST Council Shri. S. S. Kulkarni. Secretory General, IDST Shri. Alok Mukherjee, Convener CATS-2024

Contact

Email: cats2024pune@gmail.com Mobile Nos.: 9822846604 (Convener) 9822653076 (Chairman, IDST, Pune)

CATS-2024

Places to visit in Pune

Exhibition

The Conclave shall be attended by Researchers, Academicians, Technocrats, Entrepreneurs and students from all over India. The exhibition will give an excellent opportunity to showcase products and state-of-the-art innovations in Robotics and Autonomous technology.

Stall layout:

Out door - 10 ft x10 ft covered area Includes - 2 chairs, 1 table, lights, fan and two - 5 amp points

Stall charges:

Rs. 30,000/- (Rupees Thirty Thousand only) (Two delegates free)

Last date for stall booking:

15 Dec. 2023

Sponsorship

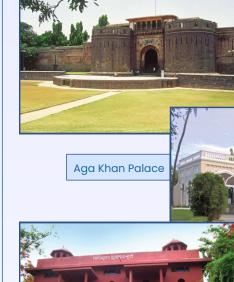
Gold sponsor:

Rs. 1,00,000/- (Rupees One Lac only)

(Two delegates free)

Silver sponsor:

Rs. 50,000/- (Rupees Fifty Thousand only) (One delegate free)



Shaniwar Wada

Lal Mahal

Raja Dinkar Kelkar Museum



Dagadusheth Ganapati