

ARMY INSTITUTE OF TECHNOLOGY

CENTER OF EXCELLENCE FOR AI AND ROBOTICS

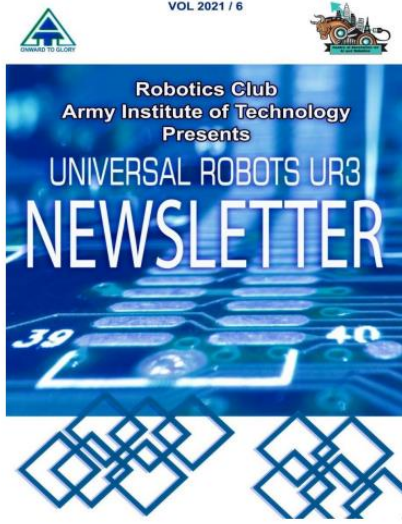

VISION: To become a leading learning center for Artificial Intelligence and Robotics by providing a conducive environment with transferring engineering knowledge, inculcating creative thinking, and generating passion for doing it yourself approach which will make them Industry ready.


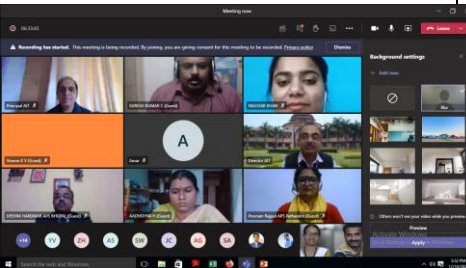

MISSION:

- Provide students the knowledge that makes them professional engineers, inculcate within, a solid base in mechatronics engineering, analytical and rational skills, for making them future leaders.
- Develop an accomplished human resources with an aptitude for entrepreneurship capabilities, team spirit and novel approach for their professional careers with lifelong learners.
- Impart quality learning culture to students to promote high standards of professional ethics, transparency, and accountability.

Academic Year	:	2020-21
Name of Faculty IC	:	Avinash Paitl
Name of Secretary	:	1. Ankush Roy 2. Pooja Singh
Budget Allocated by Institute	:	6,00,000
Sponsorship Received	:	1
Events Conducted	:	9

Sr. No	Name of Event	Details of Events	No. of Participants	Name of Winner with Position	Photo of Event with Caption
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1	Started a Robotex news letter of CEAR	A monthly news letter covering the recent news and activities related to robotics and allied fields	15 students members and 5 faculty members Ankush Roy(TE) Pooja Singh(TE) Yadhu Krishna PP (SE) Vishal Singh (FE) Kumar Som(FE) Dipesh Kumar (FE) Abhay Kumar Shukla(FE) Harsh Poonia(FE) Atulay Latiyan(FE) Ayush Singh(FE) Rishabh Tiwari(FE) Piyush Yadav(FE) Rhitvik Deodhar (FE)		
2	Train the trainer program	The AI and Machine Learning certificate course pilot program was initiated to create the mentors. AI and ML workshop, Python Workshop from Courseera certificate program	Rhitvik Vijay Deodar Abhinaw Gupta Yadhu Krishna P P Prashant Singh		
3	Faculty Development Program on "Robotics"	National 7th Dec to 10th Dec 2020 Organizer: Centre of Excellence for AI and Robotics, Army Institute of Technology Resource persons: Dr. P B Karandikar, Dr. J D Patil, Dr. Surekha K S, Prof. Avinash Patil, Prof Sushma Patil, Amar Barik,	40 school teachers from various APS		

		<p>Saumyakanta and Kenneth Dsilva</p> <p>This FDP on “Robotics”, provided a platform to Army Public School Teachers to learn the basics of electronics, tools and techniques needed for the design and development of Robots. It aims to provide the knowledge and skills needed for teachers to cater to present day requirement of Robotics in schools.</p>			  
4	10th edition of NES Innovation Awards	<p>Agriculture Farm BOT</p> <p>Idea: Our idea is to replace the traditional tools and implements to modern one. Tractors are not</p>	<p>Arunima . P</p> <p>Raju . P</p> <p>Vikas kumar</p> <p>Neha choudhar</p>	Secure d position in	

		portable and cannot be used in hilly areas for tilling. Our idea is to replace it with robotic machine which is portable and requires less man power. In case of high vertical interval between terraces light weight power tillers with suitable matching equipment can be a good source of power for doing various agricultural operations and can be lifted from with the help of 2-3 men from one terrace to another. Geography also thanks to the technological innovation that characterizes it, represents an indispensable tool for the knowledge of our territory. If used correctly, it could help environmental authorities and governments to improve the guidelines for better management of agriculture lands in mountainous regions of the world.		Top 50 entries	
5	LA FONDATION Farm Project	Sponsored project from Dassault foundation and a mentor from dassault France. A farm bot is designed to complete the <ul style="list-style-type: none"> • Mechanism that can handle crop maintenance with ease • Robust Adjustable body frame 	Vivek Singh TE E&TC Abhishek Jha TE E&TC Pooja Singh TE Mech		

		<ul style="list-style-type: none"> • Provides health status of the crop • Battery powered with exchangeable batteries. • Equipped with solar panels • Remotely controlled • Fully autonomous navigation based on vision and GPS. • Using AI Models to generate proper output for different parts of the bot , including motors and spray angles for pesticide spraying bots and weed extermination. 			
6	Tech Solutions: Line Tracer, Robo Race, Pick and Place and IC Engine	Feb 2021	InterCollege Approx 100 Students participants		
7	Tech Aakriti: Line Tracer, Robo Race, Pick and Place and IC Engine	Jan 2021	IntraCollege Approx 100 Students participants		
8	Use The PINS Wisely Workshop	A three day workshop on Robot building for FES on Sept Resource:	116 Fes and 10 SEs		

	5.0	Prof. Avinash Patil (AIT Robotics Club Incharge) Abhishek Panda(BE E&TC) Sneha (BE E&TC) Ankush Roy(TE E&TC) Abhishek Jha(TE E&TC) Priyanka(TE Mech) Yadhu (SE E&TC)			
9	AI and Robotics Training to APS Teachers	APS Dighi, APS Ahemdnagar			