



Anil Neerukonda Institute of Technology & Sciences (Autonomous)

(Permanent Affiliation by Andhra University & Approved by AICTE
Accredited by NBA (ECE, EEE, CSE, IT, Mech. Civil & Chemical) & NAAC)
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DEPARTMENT OF MECHANICAL ENGINEERING

The students of Mechanical Engineering, ANITS won the First Prize in Hardware Edition of the National level contest " **Smart India Hackathon 2022(SIH22)** organized by Ministry of Education and AICTE Across 75 nodal centres spread all over the country.

This contest which was started in the month of January 2022 culminated with the National Grand finale in which the shortlisted teams participated from 25th to 29th August 2022.

The Smart India Hackathon is mainly intended to develop innovative solutions to the hardware and software problems generally encountered in the industry and society at large. The students are posed with a variety of problems for which feasible solutions have to be developed using their inherent technical skills. The organizations working under different ministries of central government were involved in framing these challenging problems.



The winning Team "e-Curio" representing Department of Mechanical Engineering, ANITS in the National Grand Finale of Smart India Hackathon 2022

Two teams "e-Curio" & "Achievers-2022" from Mechanical Engineering, ANITS were selected for the National grand finale of SIH22. The team "e- Curio" bagged the first prize in Autodesk Smart Manufacturing category of Hardware edition.

The team "e-curio" represented by six students led by Team leader M. Uma Maheshwari and faculty mentor Mr.J. V. Bhanutej fabricated an intricate machine component within tolerance limits and possessing exquisite surface finish. This problem was posed as a challenge by the AUTODESK managers. The team won a cash prize of **Rs.1,00,000/-**.

Both the teams were congratulated by the Mechanical Engg. HoD Dr. B. NagaRaju and Prof. K. Sri Rama Krishna, Principal ANITS. Sri K.Niranjana Kumar ,CEO and Sri Bharath Reddy ,General Secretary of ANES appreciated the teams for their excellent performance.

Details of Team e-Curio:

Organization: Autodesk India Pvt. Ltd.

Category: Hardware

Problem Statement Number: AV1235

Problem Statement: “Smart Manufacturing”

Computer-Aided Manufacturing (CAM) is the use of software and computer-controlled machinery to automate a manufacturing process. Based on that definition, you need three components for a CAM system to function: Software that tells a machine how to make a product by generating toolpaths. Machinery that can turn raw material into a finished product. Post Processing converts toolpaths into a language machines can understand. From high-efficiency roughing with Adaptive Clearing to simplified control of multi-axis machines with Tool Orientation, Autodesk Fusion 360 makes it easy to program your CNC machine, fast. Manufacture with 2.5, 3, 4, and 5-axis milling, probing, turning, mill-turning, and profiling operations paired with a powerful post engine all included alongside professional design tools. Students are supposed to use Fusion 360 Software to generate NC code with machine details & tool library. Mentor will help to manufacture the metal component using CNC machine & NC code generated by participants.”



	Name	Gender (M/F)	Email id	Mobile no.
Team Leader	M.UMA MAHESWARI	F	marothuumamaheswari.20.me@anits.edu.in	6309725406
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Team Member 4	K.NITHYA VARSHINI	F	karrinithyavarshini.20.me@anits.edu.in	9618171770
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Team Mentor	Mr.J.V.BHANUTEJ Asst.Professor Mech Engg. ANITS	M	bhanutej.me@anits.edu.in	9700035246

Details of Team Achievers 2022:

Organization: Defence Research and Development Organisation (DRDO), Ministry of Defence.

Category: Software

Problem Statement Number: NR1170

Problem Statement: "Jelly Bots - develop a device/solution to save the life of people drowning at beaches in tourist destination."

Loss of lives due to drowning is being reported at popular Sea shores/beaches which need to be curtailed through the application of jelly bots. On alerting by distress visuals, jelly bots will swim/travel to the zone and target will get entrapped by soft tentacles to bring to the safety following the programmed path.



	Name	Gender (M/F)	Email id	Mobile no.
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