

#### Bansilal Ramnath Agarwal Charitable Trust's

#### Vishwakarma Institute of Information Technology, Pune-48



(An Autonomous Institute Affiliated to Savitribai Phule Pune University)NAAC Accredited with 'A' Grade, ISO 9001:2015 Certified Institute

#### VIIT Robotics Club

#### **About VRC:**

Hey! We at VIIT Robotics Club are a group of students who are passionate and enthusiastic about robotics. The club was established in 2007 and since then we have been working closely towards competitions, researching, and have been a part of countless projects relating to robotics. We are most known for having participated in the ABU Robocon competitions and have a few notable achievements in it. We are a versatile club and welcome people from all different branches with different interests to join and work alongside each other. We also believe in having interdisciplinary knowledge and try to instill that belief in our work.

Here, at VIIT Robotics Club we have always worked with the main purpose of developing a future ready engineer, well versed in both technical and managerial skills. Many ex-members of this club are now at top positions in their chosen career fields and looking back have just one thing to say that the interdisciplinary knowledge and experience gained by them during those years at the VIIT Robotics Club, has always given them an edge over their academics then and now in their career as well.

### Team 2019-2020:

### **Committee:**

President: Shreyas Kulkarni Vice President: Anish Kulkarni

- Top-notch aluminium extrusions and brackets imported from Japan.
- · Optimum use of laser-cutting for custom angle brackets.
- · 3D Printed Grabbing Arm Mechanism.
- Fool-proof PCB designs with detailed calculations for track-widths and placement of components. Manufactured from quality manufacturer trusted by TIFR (PCB Power, Gandhinagar).
- Leap towards using STM32 rather than Arduino.
- Better aesthetics achieved in the virtue of no subtractive manufacturing.
- Research on development of in-house diagnostic boards for failure analysis (Current, voltage and pneumatic pressure measurement for each actuator).
- · Regular meetings with industry mentor with detailed minutes of meetings.
- Obtained a distinction with 100/100 in Round 1 (Technical Documentation) along with 13 other teams in India.

• End-to-end documentation protocols include Generating datasheets and user manuals of in-house designed PCBs and embedded software programs. A 53-page detailed document summarizing the work completed within the year.



Team 2020-21:

#### Committee:

President: Sharan Shetty Vice President: Pranav Lulu

- Secured 98/100 in Round 1 (Technical Documentation) of Robocon 2021.
- Using weekly sprints and everyday stand-up calls at 9pm; all online work concerning Robocon 2021 was completed.
- Secured 41/77 in Round 2.
- BOT Developed:
- The designed gripper shown below designed and developed by mechanical team of the club given student a chance of being part of research at IISc Bangalore.







# Team 2021-22: Committee:

President: Chaitanya Gaikwad Vice President: Kshitish Gadre Publicity Head: Rhea Molugu

Secretary and Finance Head: Soham Jadhav Industry Relations Head: Anushka Sinha

Scored 89/100 in Round 1 (Technical Documentation) for Robocon 2022.

 Conducted workshop on Embedded C and implementation on FireBird V. With participation of over 60 students, were many where of the student participated are part of our club for 2022-23 term and already working on bots, the event was complete successfully.







#### Team 2022-23

#### **Committee:**

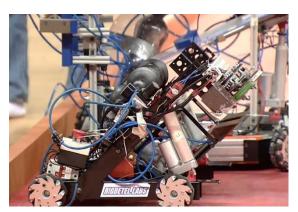
President: Shreyash Chaudhari Vice president: Sujeet Jagtap

Team manager: Ayush Kumar Ojha

Publicity and Creative head: Prathmesh Kumbhar

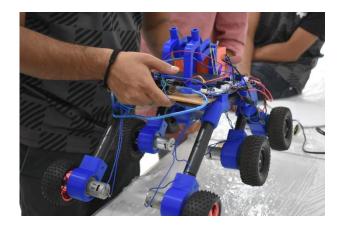
Documentation head: Aakash Shinde

- Completed with international top 15 among 300 worldwide in World robotic competition Technoxian Fastest Line Follower Competition.
- Presently 5 teams are participating in E-Yantra World Robotics Competition, 2023
- Working on two industry projects: Under guidance of Dr. Debanik Roy:
   (Scientist, Division of Remote Handling & Robotics, Bhabha Atomic Research Centre, Department of Atomic Energy (DAE), Govt. of India, Mumbai 400085, India Professor, Homi Bhabha National Institute (HBNI), DAE)
- Were Invited and attended the first ROS summit in India.





- The club is moving towards the advance robotics and developing bots using ROS and preparing for upcoming future competitions.
- Scored 100/100 in Stage 1 and 70/100 in Stage 2 of ABU Robocon 2023 and secured AIR 21 in Stage 3 held in IIT Delhi.
- Placed 3rd in the Zonals round of Escalade, a robotics competition arranged by us in collaboration with IIT Guwhati for their fest, Techniche.
- Current bots in development: Miniature rolling capsule bot and miniature worm bot. And a drone is under development.
- Secured Top 50 rank and got selected for Stage 2 in EYANTRA Robotics Competition 2022







## VISHWAKARMA INSTITUTE OF INFORMATION TECHNOLOGY, PUNE

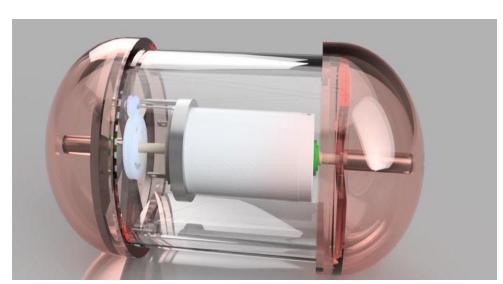




 Participated in RC competitions for VJTI and secured Rank 2 in MIT ADT competitions.









#### Notable mentions include:

- 1. Aditya Borse Placed at Nvidia
- 2. Omkar Susladkar Research associate @IISc Bangalore | Teaching and Research Assistant Indian Institute of Technology Roorkee | RA @IIT jodhpur. | Deep learning engineer @Mercedeas Benz RnD.
- 3. Sharwari Bhosle Placed at Infineon
- 4. Tejas Kadgaonkar Placed at Infineon
- 5. Vedant phapale Placed at AlphaPaul
- 6. Sharan Shetty Placed at FEV India
- 7. Anish Kulkarni Placed as Design engineer at Crest Test Systems(Youngest department head)
- 8. Pranav Lulu Placed at Cadence
- 9. Ketan Nehete Placed at Robert Bosch centre for cyber-physical systems in IISc Bangalore.
- 10. Salil Shrivastava Placed at HSBC
- 11. Aniket Salvi Placed at Eaton GSC COE
- 12. Rushikesh dudhate Placed as programming analyst at WNS
- 13. Rahul shah Placed as software engineer 3 at walmart