



**ROBOTiX CLUB**  
National Institute of Technology  
Raipur



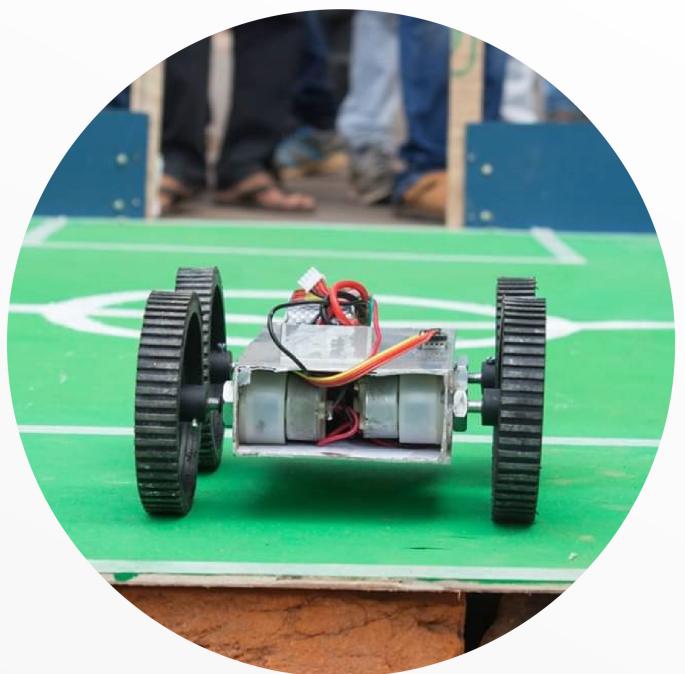
**2019**

# **ROBOTIX CLUB NIT RAIPUR**

## **INTRODUCTION**

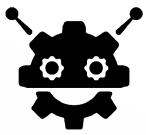
The Robotix Club of NITRR is the perfect combination of innovators, providers and experts in the field of Robotics. The club has been inspiring minds ever since its inception in 2014. With the vision of developing technological skills in the diverse field of mechatronics and robotics by transcending the theoretical knowledge into live application and providing modelled solutions for the real world problems, the club has been achieving great heights. Apart from hosting competition and educational workshop the students from Robotix club also represent the college in national and international competitions. The Club had made headlines after participating in ABU ROBOCON 2018, India's largest Robotics competition.

The club continues to inspire a generation of innovators and tech enthusiasts to nurture and grow their knowledge.



**Brochure**

# OUR TEAM



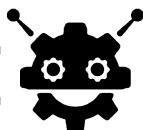
**“The Achievements of an organization are the result of the combined effect of each individual.”**

The achievement get height when technovater and experts makes the club .

Robotics club has eight most experienced and attentive conveners.The club has six head coordinators and sixteen managers who nurture the club with their knowledge. Along with them, the club has thirty eight inspiring minds in the form of coordinators.



# EVENT TIMELINE



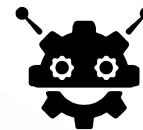
Sr.no	Events	Date	About
1	SESSION ON MANUAL ROBOTICS (FREE)	11/8/16	Basic ideas about manual robot, its uses, construction, application
2	SESSION ON ARDUINO (FREE)	24-25/8/16	Introduction and application of Arduino. It was a successful event with a crowd of 180+.
3	WORKSHOP FOR ROBOTICS EVENTS IN AAVARTAN (FREE)	14-15/9/16	Workshop for the students to guide and to help them in developing essential skills which are required in making manual and autonomous bots for the Robotics events.
4	ROBOSHOOT EVENT (AAVARTAN)	21/9/16	A Roboshoot event in Aavartan using manually controlled bot
5	WORKSHOP ON DIABOLIC DUMPER (FREE)	23/9/16	Introduction and application of diabolic dumper.

6	PCB DESIGNING WORKSHOP (PAID WORK SHOP)	23/10/16	Circuit design on breadboard, zero PCB and PCB Designing on copper plate. Free kit to all participants and certificates.
7	IC ENGINE OVERHAULING WORKSHOP (PAID WORKSHOP)	21-22/1/17	Complete overhauling, dismantling and subsequent assembling of an engine. Fundamentals, suspension system, transmission system.
8	BRAIN WAVE ROBOTICS WORKSHOP (PAID WORKSHOP)	21-22/1/17	Hands on experience on Arduino along with all the power it brings in with its actuators and sensors. work with the brain sense sensor. Analysis of brain wave, Bluetooth interfacing, pc-controlled robot.
9	ARTIFICIAL INTELLEGENCE & ROBOTICS	20-21/1/18	Workshop on the most Advanced topic "Artificial Intelligence & Robotics". 6+ Live AI Robot projects covered. Discussion on the esteemed International Robotics competition Robocon'

10	WORKSHOP ON MANUAL ROBOTICS AND EMBEDDED SYSTEMS (FREE)	18 &24/8/17	In this we get to know about these and the power they bring in with actuators and sensors. More than 150+ students from various colleges attended the session. Speakers of the session: Shubham Gupta and Pranay Sahu.
11	TERRAIN TRADER BY AA-VARTAN	6/10/18	Problem statement to make a manually controlled bot which can overcome some given hurdles, cash prize for the winner
12	DRONE TECHNOLOGY AND CONSTRUCTION WORKSHOP	16-17/9/17	To help the young and innovative minds develop this scenario, the workshop organised on Drone Technology and Construction at NIT Raipur. An interactive quiz at the end of the session will be held. The top three teams will be provided with a certification of merit. Winner team awarded a Quadcopter worth 8000/-INR. Speaker from DRDO and experts from BHU.

13	AQUAROBO of 'AVISHKAR' FEST 2k17	16/12/17	A competition on the given problem statement using aquarobics
14	ROBOTICA EXHIBITION	20/1/18	About Water bot, Robocon, Bluetooth RC, RC Plane Terrain Bot, Bomb disposal, Quad, Drones, Shell ECO Marathon.
15	WORKSHOP ON MANUAL ROBOTICS (FREE)	6/9/18	manual robot requires human intervention for controlling and guiding the robot. Having one of the most peculiar kind of control systems, manual robots are used for performing complex and arduous jobs.
16	WORKSHOP ON ARDUI-BOTICS (FREE)	12/2/19	Basic ideas about robotics and Arduino.
17	WORKSHOP ON ARDUIBOT-ICS (PAID WORKSHOP)	16-17/2/19	Team Robotics in association with *Technex, IIT BHU* conducted workshop on Arduibotics and to make different bots like-Line follower, Obstacle avoider, Voice/smart-phone-controlled bot. Certificate from IIT BHU.

# FUTURE PROSPECTS



## Workshops

With a belief that hands on experience provides a much better insight and understanding of a topic, Robotics Club of NIT Raipur will be organizing various workshops on the diverse field of Robotics. A growing field like 'Robotics' has many application, from simple line follower to Artificial Intelligence. We organize numerous Free and Paid workshops throughout the year with the primary aim to instill confidence and ignite a spark of interest in Robotics. Various topic of workshop includes: - Artificial Intelligence, IoT, Machine Learning, Embedded System, Autonomous Robotics and Cloud Based to name a few.

## Industrial Tie-Ups

Tie-ups of Industries with Robotics Club of NIT Raipur will help students of not only NIT but also students attending workshops to have a real life experience of Robots and Machinery which are being used nowadays in various industries to achieve higher efficiency.

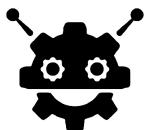
Roboroom – Parts and instrumentation used by industrial grade robots are expected to showcase in the college. This will help students to experience first-hand the basics of robotics and have a deeper understanding of the topic.



## Mega Events

Robotix Club NITRR will be working extensively on ideas for future projects which will include but not limited to organizing major Robotic Events in partnership with various companies and expected participation from various Technical institute from all over India including IITs, IIITs etc.

# OUR FEATURES ON VARIOUS NEWSLETTER



## PATRIKA e-newspaper

Workshop on arduino-robotics was organized by Robotix Club NITRR in collaboration with IIT BHU Technex. Over 200 students participated in the 2-day workshop with students from various colleges including MATs, BIT Durg, GEC Raipur and GEC Bilaspur. Basic of robotics and arduino was discussed and projects like line follower, voice control, obstacle avoider were designed by students.

## CENTRAL CHRONICLE NEWS

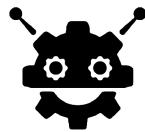
Robotix Club NITRR organized various events in Technical Fest Aavartan'18 like Roboshoot, Line follower bot competition. Students from different colleges and schools participated in these competition.



## DAINIK BHASKAR : BHASKAR ePaper

Robosoccer Game was conducted by RobotixClub as an independent event in 2-Day Technical Fest "Aavartan'18 of NIT Raipur. Students from colleges and students made their own remote control robots and competed against each other to score in a mini football field. The competition was one-on-one and the player who scored the most goal in the given time limit wins the game.

# SPONSORSHIP PROSPECTS

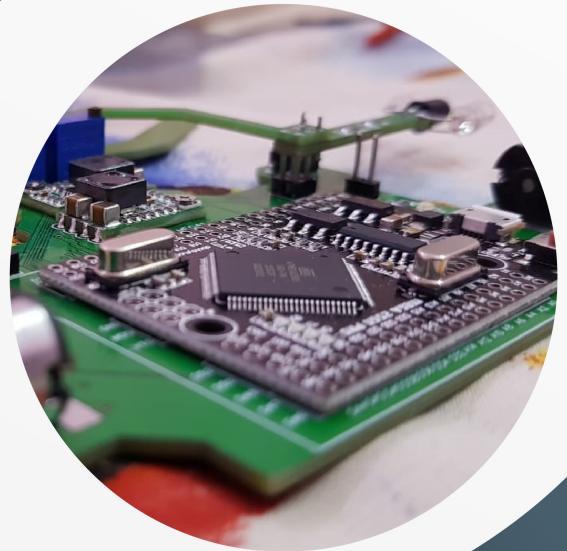


Sponsorship provides a great means of broadening our competitive edge by improving our club's image, prestige and credibility by supporting events that we target market finds attractive. In recent years, corporate sponsorship has become the fastest growing type of marketing

## **History of our Sponsors :-**

### **TechTrunk Ventures Pvt. Ltd (for “Brainwave Robotics Workshop”)-**

It is a certified Training Company. Their team has a goal to reach out more than 1 billion students and working professionals across the globe. They have done more than 50 Research labs and CoE setups. Their enthusiastic and passionate team is backed and supported by a team of Advisors who have more than 20 years of experience of working as industry leaders, which makes them an expert team to provide best services to their customers.



## **Gate Academy-**

The 'Gate Academy' is a premier GATE coaching institute with 50+ centres across the country. We are one of the first education institutes in India which leverages technology extensively to provide quality GATE coaching to our students.

## **Aviorone Technologies Pvt. Ltd-**

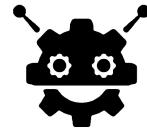
It is start-up company incubated by 36INC-Incubation centre of Chhattisgarh Govt. Aviorone Technologies Pvt. Ltd. is working diligently towards creating awareness about aviation in Chhattisgarh and in India as a whole. Aviorone started in October, 2016 with the vision is to make Chhattisgarh-the first state in India and in the world with maximum number of trained professionals in this future technology. Aviorone Tech. Pvt. Ltd., is the one-stop for all kinds of services related to drones such as Arial photography, Real estate Site Mapping, Aerial Surveillance, Industrial Inspection, Drones in Farming and etc. They provide hi-tech drones with excellent features and efficiency that can serve as an important tool for survey, surveillance and security.

## **Innovian Technology Private Limited-**

It is a Private company incorporated on 31st December, 2014. It is involved in software publishing, consultancy and supply.



# COLLABORATION PARTNERS



**For the workshop organised on Arduino.**

**TechNex -**

Technex is an annual Techno-Management festival of Indian Institute of Technology(BHU) Varanasi held as a three-day event in late February or early March. The festival and its organising team hold a number of activities throughout the year, as well as several social initiatives to encourage novel technological solutions to major scientific challenges like resource shortages, climate change, and day-to-day problems.