

## SAMARPAN THE TECHNOPHILIA CLUB REPORT

### Position Holders

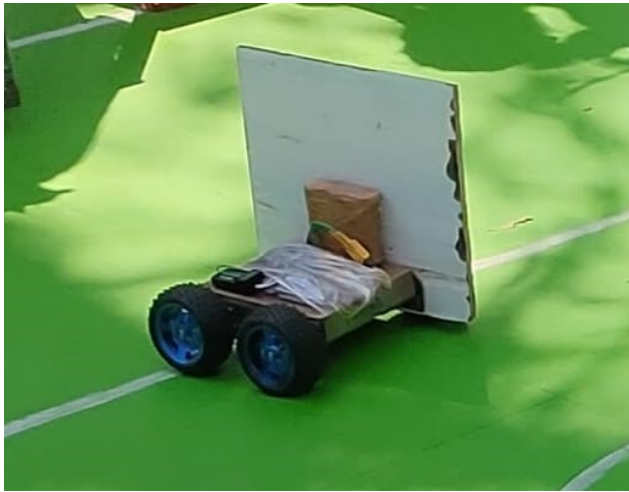
S.No.	Faculty Coordinator	Co-Coordinator	Secretaries (2021 - 2022)	Joint Secretaries (2021 - 2022)
1.	Ms. Rachna Dhir	Ms. Manju	Aman Deepanshu Parul Rahul Vibhor	Hitarth Machama Rakshit Bajaj Satchit Sharma Vishal Aggarwal
S.No.	Faculty Coordinator	Co-Coordinator	Secretaries (2022 - 2023)	Joint Secretaries (2022 - 2023)
1.	Ms. Rachna Dhir	Ms. Manju	Hitarth Machama Rakshit Bajaj Satchit Sharma Vishal Aggarwal	Aditya Pal Himanshu Dedha Pankaj Sachdeva Rishabh Gaur Somya Verma
S.No.	Faculty Coordinator	Co-Coordinator	Secretaries (2023 - 2024)	Joint Secretaries (2023 - 2024)
1.	Ms. Rachna Dhir	Ms. Manju	Aditya Pal Himanshu Dedha Pankaj Sachdeva Rishabh Gaur Somya Verma	Akanksha Garg Chirag Rai Megha Bharija Pulkit Mangla Suchet

### Activity List

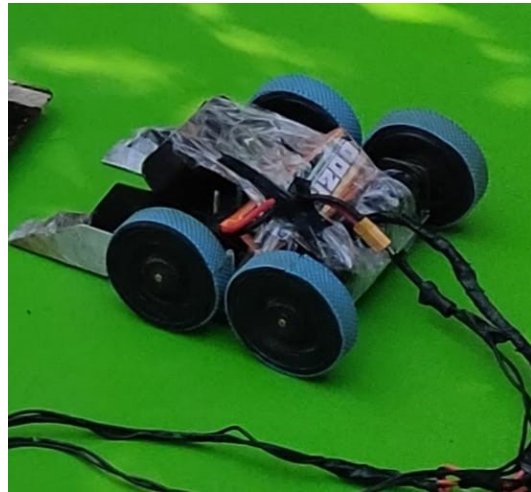
S. NO.	Name of Activity	Date	Number of Participants
1	Project: Robo Soccer	11/06/2023	10
2	Escalade 12.0	18/07/2023-25/07/2023	11
3	Technoxian - World Robotics Championship	25/07/2023-27/07/2023	20
4	Interfacing IOT	20/08/2023	86
5	55 <sup>th</sup> Foundation Day	16/09/2023	20
6	PCB Designing With Altium	31/01/2024	31
7	Invictus'24	12/02/2024	8
8	Techkriti'24	14/03/2024-17/03/2024	6
9	Cloud Computing	05/04/2024	35

## Project: Robo Soccer

SAMARPAN-The Technophilia made a project for the famous robotics competition named “ROBO SOCCER”. In Robo-Soccer, two teams having two or three bots in each team compete with each other for making the most number of goals just as in the real soccer game. This competition held under “The World’s Robotics Championship” in July, 2023. We made three robots for this competition having one Goal Keeper and Two Fielders. The robots were made in such a way that they can kick the ball, stop the ball from making a goal and drag the opponent robots in the arena. This is made possible due to the kicker, dribbler and strong bodies of the robots.



BOT – 1



BOT – 2



BOT – 3

## Escalade 12.0

SAMARPAN: The Technophilia participated in the annual robotics competition organized by IIT Guwahati named “Escalade 12.0” under their technical event “Techniche”. The prelims round of this event were scheduled from 18<sup>th</sup> July to 25<sup>th</sup> July, 2023. We participated in the event to test our robotics skills on a big level. We are glad to announce that we successfully cleared the Prelims round of this competition held in Delhi and participated in the Mains round on 31<sup>st</sup> August and 3<sup>rd</sup> September in IIT Guwahati campus. Teams from all over India and outside India participated in the competition and we got a chance to compete with them.



# Technoxian - World Robotics Championship

SAMARPAN: The Technophilia is participated in the robotics competition named “**Technoxian – World Robotics Championship**” supported and recognized by various governments across the world including the ‘Ministry of Communications & IT(Melty)’, ‘Department Of Science & Technology MR Government Of India’ and ‘All India Council For Robotics & Automation (AICRA)’. It is scheduled in July, 2023. We participated in three competitions there named “**Robo-Soccer**”, “**Robo-Race**” and “**Maze-Solver**”. The participation fee for each competition was rupees 2950/-. Teams from all over India and outside India participated in the competition and we got a chance to compete with them.

**STUDENTS FACILITY ARENA**

- ROBO SOLVER**: Recommended to start your career in robotics.
- ROBO RACE**: To be desirable skills in the field of robotics.
- ROBO-SOC**: To be desirable skills in the field of robotics.
- ROBO-IDEA**: To be desirable skills in the field of robotics.
- LINE FOLLOWER**: To be desirable skills in the field of robotics.
- ROBO-SOCER**: To be desirable skills in the field of robotics.
- ROBO-TOUR**: To be desirable skills in the field of robotics.
- RO-CRAFT**: To be desirable skills in the field of robotics.
- ROBO-OPTIC**: To be desirable skills in the field of robotics.
- WATER OBJECT**: To be desirable skills in the field of robotics.

**FREE TRAINING**: A free training program exclusively for members who have been selected for the competition and awarding.

**NETWORKING**: Get in touch with international club members and explore the opportunity to share educational knowledge.

**CHAMPIONSHIP**: An opportunity for students to participate in international competitions, such as AICRA, IAS, and International Robotics Olympiad, and receive awards and recognition.

**RECOGNITION**: We give you a platform to showcase your innovation at prominent events, the event award, IAS and IASU, Tech Magazine.

**SPONSORSHIPS**: We provide the best of support for teams and clubs to sponsor, receive and an international market for sponsorship.

**STARTUP SUPPORT**: Students teams will be given opportunity to meet the potential sponsors and individuals to help them big ideas into reality.

**CHALLENGES**

**ROBO SOCCER**: The most famous challenge of Technoxian, ROBO Soccer is a challenge for players to enter robots, challenge and compete creatively with robotic skills, robotics, engineering, and math. In this challenge, 2 robots are made to play a ball game in a large arena with the aim to kick more goals than the opponent in a soccer game. The best part of building robots for students is that they are fun, creative, and a great learning tool.

**MAZE SOLVER**: The maze solver challenge is a challenge for students to build a robot that can navigate a maze. The challenge is to build a robot that can navigate a maze of black lines on a white background. The robot must start at the entrance of the maze and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a maze of black lines on a white background. The robot must start at the entrance of the maze and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a maze of black lines on a white background. The robot must start at the entrance of the maze and follow the lines until it reaches the exit.

**BOTS COMBAT**: This exciting challenge requires the participants to design robots that are able to withstand the hits of the other robots. The competition is held in a large arena where the robots are placed on a table. In simple words, the robots are placed on a table and they are given a task to knock the maximum number of the other robots out of the arena. The challenge is to build a robot that can withstand the hits of the other robots. The challenge is to build a robot that can withstand the hits of the other robots. The challenge is to build a robot that can withstand the hits of the other robots.

**CHALLENGES**

**ROBORACE**: As the name suggests, the objective of this competition is to encourage participants to make their robots race along the track. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit.

**INNOVATION**: It is a stage for the winners of each challenge to present their ideas, skills and projects to the audience. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit. The challenge is to build a robot that can navigate a track of black lines on a white background. The robot must start at the entrance of the track and follow the lines until it reaches the exit.

**LINE FOLLOWER**: The challenge is for students to build a robot that can follow a line of black dots on a white background. The robot must start at the entrance of the line and follow the line until it reaches the exit. The challenge is to build a robot that can follow a line of black dots on a white background. The robot must start at the entrance of the line and follow the line until it reaches the exit. The challenge is to build a robot that can follow a line of black dots on a white background. The robot must start at the entrance of the line and follow the line until it reaches the exit.



## Interfacing IOT

SAMARPAN: The Technophilia has organized an open for all workshop on the topic “Internet Of Things” on 20<sup>th</sup> August 2023. This workshop was concerned about what is Internet Of Things and how it works; Technologies that made IOT possible; different wired and wireless communication protocols used, along with some eye catching projects including Biometric attendance system, RFID attendance system, home automation by self-made web interface etc. Audience included students from 2nd and 3rd year.



The poster is for a workshop titled "Interfacing IOT" organized by SAMARPAN THE TECHNOPHILIA. It features logos for JC BOSE UST YMCA FDB and SAMARPAN THE TECHNOPHILIA. The text includes "Samarpan The Technophilia <PRESENTS> Workshop Interfacing IOT" and "OPEN FOR ALL". The date is "20 AUG, 2023", the time is "TBA", and the location is "G7". Contact information is provided: "CONTACT: PULKIT-9971815790, CHIRAG-8368621261". The poster also includes an Instagram handle "SAMARPAN\_THE\_TECHNOPHILIA" and a graphic of a hand holding a glowing IOT network.



## 55th Foundation Day

SAMARPAN: The Technophilia participated in the universities 55<sup>th</sup> Foundation Day, which is celebrated on 16<sup>th</sup> September every year. We and our brilliant club members showcased maximum number of wide range projects from electronic projects to robotics and coding projects. Some of the projects we showcased were, Self-balancing Robot, Gesture Drawing using OpenCV, Game Development projects using Python (Snake game, Chess) Mini Games and Canteen Ordering System a website development project, Self-fabricated electronic projects such as Sound Activated LED Panel, Dynamic Text Scrolling Box.



## PCB Designing With Altium

SAMARPAN: The Technophilia conducted one day offline Hands On Workshop “PCBIFY”. The workshop was focused on delivering the best content regarding PCB design and its fabrication techniques. We covered the theory aspect of PCB and what are the key points one must focus on while designing a PCB. Our main agenda for the workshop was to give hands on experience to the audience on how to design any PCB from scratch using industrial PCB Design utility software called “Altium Designer” and “Altium Circuit Maker”. We successfully designed multiple PCBs and helped the audience to fabricate few.

Overall, the session was a success as we were able to provide an exposure to our audience such that they can now design and self-fabricate any PCB they require.

JC BOSE UNIVERSITY  
YMCA FARIDABAD

SAMARPAN  
THE TECHNOPHILIA

OPEN TO ALL

**PCBIFY**  
**SAMARPAN**  
**THE TECHNOPHILIA**

31ST JAN  
2023

STARTS AT  
4 PM  
ONWARDS

TBA  
(OFFLINE)

**DISCUSSION & INSIGHT**

- ✓ Master PCB Design
- ✓ Circuitry Creation

**CONTACT:**  
PULKIT: 99718 15790  
CHIRAG: 83686 21261

**PCB DESIGNING FABRICATION**  
A Hands On Workshop

SCAN ME!

**FACULTY COORDINATORS:** MS. RACHNA  
MS. MANJU

**REGISTRATION**  
samarpan\_\_the\_\_technophilia

PHOTO: A large group of students sitting in a lecture hall, attending the workshop.



## Invictus'24

The SAMARPAN the Technophilia club members participated in INVICTUS'24, the annual technical festival of Delhi Technological University (DTU) which was conducted on 12<sup>th</sup> February 2024, members embarked on a thrilling and intellectually stimulating journey of Robotics. Armed with their knowledge and expertise in the fields of robotics, coding, and electronics, the club members competed against some of the brightest minds in the country in a variety of challenging events. From the adrenaline fueled **Robo-Race** and **Road-Soccer** to the intense competition of **Fast Line Follower** Robot. The SAMARPAN teams pushed to their limits and were needed to utilize all their skills, creativity, and resourcefulness to emerge victorious. In addition to these exciting competitions, the students were also had the opportunity to network with like-minded individuals, attend workshops and seminars, and explore the latest innovations and advancements in the field of technology.





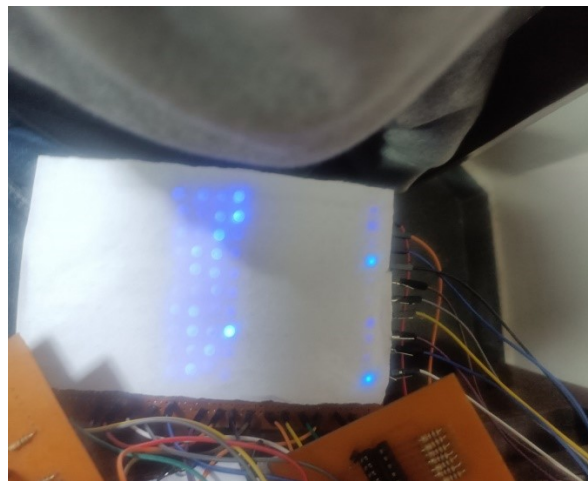
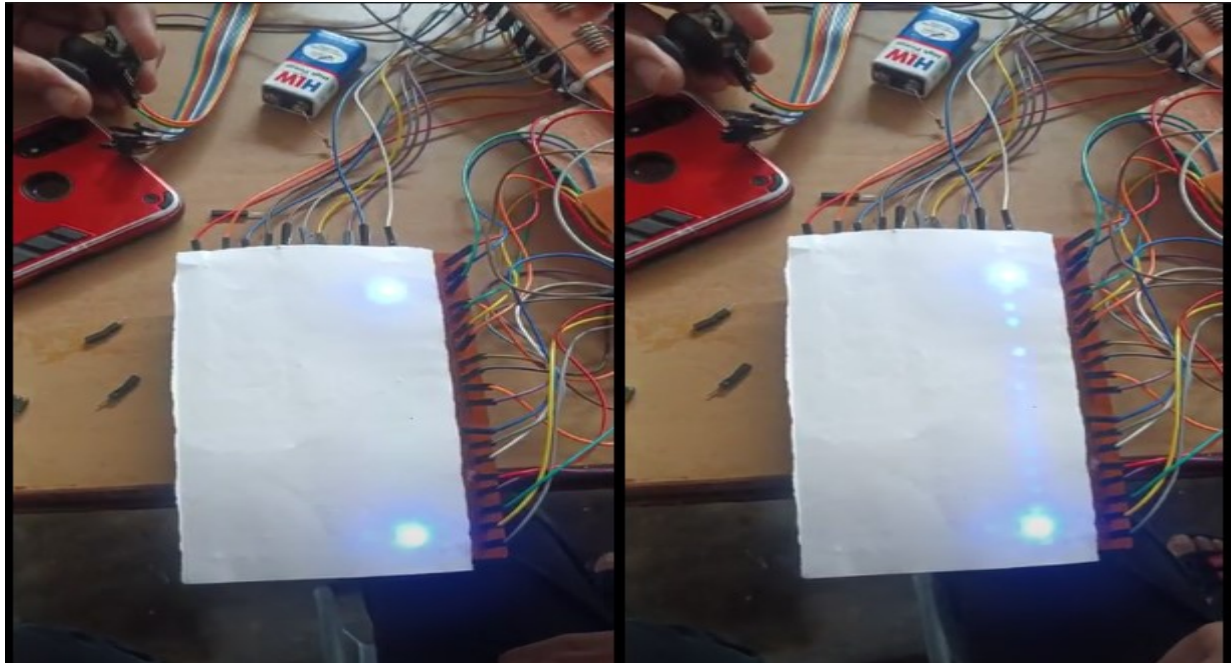
## Techkriti'24

The brilliant students of SAMARPAN the Technophilia participated in Techkriti 2024, the highly anticipated annual technical festival held at IIT Kanpur. The competition focused on embedded microcontrollers with the theme of ECDC, and our students showcased their technical expertise by building an innovative project Galactic Dodger, a self-fabricated gaming console, and Secure Comms, In this competition we created a two way mobile communication using GSM module and Arduino UNO to transfer data and to detect error during transmission using parity bit and correct the data.

The SAMARPAN team's project was highly impressive, securing the Fifth position in the Galactic Dodger competition.

Overall, the SAMARPAN team's participation in Techkriti 2024 was a success, showcasing their exceptional skills and talent in the field of embedded microcontrollers and GSM communication. Their project on Galactic Dodger, a self-fabricated gaming console and Secure Comms, represents a significant step forward in the development of innovative solutions that prioritize entertainment and comfort in our everyday lives.









## Cloud Computing

A one-day offline session on "Cloud Computing" was organized by SAMARPAN: The Technophilia in which we taught and gave hands-on experience with minor projects using Azure, Google Cloud, AWS and also how these technologies are implemented in industry or for personal use on projects utilizing cloud storage or similar utilities. We also covered topics from basic theory to its practical application and how to implement this technology, its types & specifications and many more intermediate and advanced topics which will help students to kick start with making and integrating projects with cloud on their own. The event turned out to be a successful one, and was accompanied by a decent strength of interactive and enthusiastic audience



**JC BOSE UST  
YMCA, FARIDABAD**

**SAMARPAN  
The Technophilia**

# CLOUD COMPUTING session

**5TH APRIL '24  
4PM  
F6 (EL DEPARTMENT)**

**CRYPTOGRAPHY**

**COMPUTING**

**DATA STORAGE**

FOR MORE INFO, CONTACT:  
PULKIT: 9971815790  
SUCHET: 8920807715

