SIDDAGANGA INSTITUTE OF TECHNOLOGY
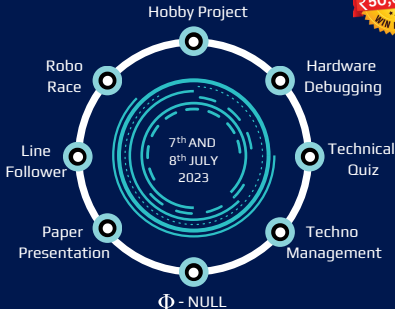
(AN AUTONOMOUS INSTITUTE AFFILIATED TO VTU, BELAGAVI
APPROVED BY AICTE, NEW DELHI, ACCREDITED BY NAAC WITH 'A++' GRADE
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TUMAKURU, KARNATAKA - 572103

NATIONAL LEVEL TECHNICAL SYMPOSIUM

TECHNISIUM 2023

ORGANISED BY: DEPARTMENTS OF EC, ET, EE & EI
OPEN FOR ALL BRANCHES

WIN PRIZES
₹50,000/-
WIN PRIZES

Hobby Project

Robo Race

Hardware Debugging

Line Follower

7th AND 8th JULY 2023

Technical Quiz

Paper Presentation

Techno Management

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FACULTY CO-ORDINATOR	PRESIDENT	STUDENT COORDINATOR
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(9945193851)		(9880343175)

STUDENT CONVENERS

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FOR ANY QUERIES EMAIL : technisium2023@gmail.com

HOBBY PROJECT

Technisium gives our research-oriented friends a chance to show off their hard work and dedication. Be it Application oriented projects or just a basic project in hardware, students are encouraged to come up with their small "inventions" and win the big bucks for it. Projects may be hardware or software based

RULES

- The event will be held on two different days
- The preliminary round will on 7th of July and the selected projects will be intimated about the upcoming round which will be on 8 July [th]
- Maximum four participants in a team
- Final year projects are not allowed
- Projects may be working model, simulation or poster presentation
- Synopsis of the project must be e-mailed on or before 30th of June to hobbyproject.technisium2023@gmail.com
- Selected synopsis will be intimated to project leads at least two days prior to the event that is on or before July 5th
- Facilities required like power supply, Wi-Fi and others will be provided on prior intimation (if available)
- Synopsis must contain block diagram/circuit diagram, components required, working, and relevant details(click here to view the template)

HOBBY PROJECT

- Name, semester, branch, e-mail IDs, contact number and other details of all the participants should be provided
- Participants must bring two hardcopies of their synopsis
- Participants are expected to bring their college IDs or bonafide certificates
- Decision of the judges is final

HARDWARE DEBUGGING

A major part of engineering consists of problem solving and by this event, we test just that in the participants. The participants will be given a circuit with a minor fault and they will have to debug the problem and make the circuit work. Analyzing networks and putting theoretical knowledge into a practical scenario is the main focus of this event

RULES

This event of debugging hardware consists of two rounds.
Round 1
A written test based on electronic circuits will be given.

Round 2
The shortlisted participants for final round will be given circuits with bugs on some simulation softwares and need to debug the same

- Max 2 in a team
- First round is of duration 45 mins
- Second round duration is 60 mins
- No provision for resources like internet, calculator, books, mobile phones

TECHNO QUIZ

In today's world, an engineer needs to be up to date with the latest technologies of the world. And to test just that, we have a Tech Quiz, which will test the knowledge base of the participants and urge them to extend it to newer horizons.

RULES

- Team should consists of maximum two participants
- Team discussion is allowed and using electronic gadgets are not allowed
- The event will be held in two rounds

1. Elimination Round:

- Each team will be given set of question paper containing 30 multiple choice questions related to technical knowledge
- Time duration is 30 minutes
- No negative marking for incorrect answer

2. Final Round:

- This round contains MCQ (20 questions) and Objective type(10 questions)
- Time limit is 30 minutes
- Negative marking will be applicable
- Considering the maximum marks scored winner will be declared

TECHNO MANAGEMENT

Technical event where students can showcase their theoretical and practical knowledge on circuit debugging.

EVENT RULES

- Team should consist of 2 to 4 participants

- **First round**
  - Participants are given with a test that has to be solved in 30 minutes
  - The questions comprises of Multiple choice questions (MCQs) that are of objective type

- **Final round**
  There are two rounds
- **Round 1** - Project is given to build with the provided electronic components within the given amount of time
  - Problem statement will be announced on the day of the event
  - Time limit is 3hours, within which participants should achieve objectives of problem statement
- **Round 2** - Complex problem statement will be given, along with components.
  - Winners will be announced based on completion level of project

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- Two participants per team
- The event will be held in two rounds

  1. Preliminary round
  Participants will be given a written test which consists of technical questions, the duration of which will be 20 minutes. Based on the cutoff, teams will be selected for the final round.

  2. Final round
- Selected teams will be divided into batches, and will be allowed to play the game batch-wise.
- Each batch will be given a time duration of 45 mins to play the game.
- Players are engaged in a snake and ladder game, where players move across the board
- Each number will have a different colours. Different tasks(questions/activities) will be given based on the colour on the game board
- Each batch will have 5/6 teams based on requirements
- Each question will have a time limit of 45 secs
- One of the team members will be on the board while the other will throw the die. However, both team members can discuss and answer the question
- +2 steps will be taken for every right answer whereas -2 steps will be taken for every wrong answer given as well as no answer given
- At the end of 45 mins, whichever team is at the highest block number will be the winner of the batch
- One team from each batch will play the final round
  time duration of the game is 20 mins and the time given to answer the question is 30 seconds
- Decision of the judges and coordinators are final

PAPER PRESENTATION

If you have an idea which has been taking shelter in your mind that would change lifestyles visibly, make inroads into the development of geeky technology or even make some known technology effective and efficient. We offer you the stage to show who you are to the world.

RULES

1. Eligibility:
- The paper presentation event is open to students from recognized educational institutions.
- Maximum of four authors and two presenters per paper Paper Presentation Event Rules and Regulations

2. Paper Format:
- Participants must prepare their full papers in IEEE conference paper format
- The paper should not exceed six pages, including all figures, tables, and references
- The document must be written in English

3. Paper Submission:
- Participant (1st author) must submit the soft copy of their full paper via email to the specified email address only (technisium23.pp@gmail.com)
- The subject line of the email should be: [Event Name] - Paper Submission - [Paper Title]
- The full paper should be attached in either Microsoft Word (.doc or .docx) or printable document format (.pdf) only

PAPER PRESENTATION

The email should include the following information for each author:
- ->Full Name
- ->College/Institution Name
- ->USN (University Seat Number)
- ->Year of Study
- ->Branch/Department
- ->Phone Number
- ->Email Address

4. Review Process:

All submitted full papers will undergo a thorough review process by a panel of expert judges.

The selection of papers for presentation will be based on criteria such as originality, technical content, relevance, and clarity.

The decision of the review panel will be final and binding.

5. Presentation Guidelines:

The selected participants will be notified via email about their acceptance

No telephonic communication will be used for notifying shortlisted participants

Participants must bring three hard copies and one soft copy of their full paper on the day of the event

The soft copy should be stored on a USB drive or a portable storage device

Each presentation will have a time limit of 12 minutes(10minutes + 2minutes for Q&A session)

Carrying college ID Card of the presenter is a must on the day of the event

PAPER PRESENTATION

6. Plagiarism:
- The submitted papers should be the original work of the participants
- Plagiarism in any form will lead to disqualification from the event

7. Equipment and Facilities:
- Participants must bring their own laptops or other necessary equipment for the presentation
- Projectors, screens, and audio systems will be provided by the organizing committee

8. Changes to Rules:
- The organizing committee reserves the right to modify or add rules if necessary
- Participants will be informed in advance about any changes made to the rules
- In case of project work presented as a paper, all project members can e authors but maximum of two can present(a letter from guide should be presented at time of event

LINE FOLLOWER

A line tracker is an autonomous machine which senses a given line and tracks it. This mechanism turns up as an application in real time in performing different redundant industrial tasks (say point to point transportation / identification).

It has two rounds:

1. Qualifying Round
In this round, the basic line following mechanism is tested. The robot should reach the end point without deviating from the line. It is mandatory to clear the qualifying round to progress for the further rounds. A maximum of two trials (changes may be made by coordinators at the time of event) are given to each team.

2. Final Round
The robot should begin from the start point and reach the end point. Similar to the qualifying round, the path consists of junctions, curves, misleading paths. The entire path should be traversed by the robot to progress into the final round.

- ✈ If in case the bot stops automatically, due to technical reasons an additional 15 seconds will be added to the final time
- ✈ Arena for the final round will not be revealed until the day of the event
- ✈ The course line is black and made on white coloured flex sheet

RULES

- ✈ A maximum of 4 participants are allowed in a team
- ✈ The Robot should be completely autonomous. It should not receive any sort of external assistance
- ✈ Bots built by participants are only allowed. (Ready kits are not allowed)
- ✈ At any point of the time, only one robot is allowed into the arena with only one participant if necessary
- ✈ The Robot must deal with lighting conditions prevailing on the day of event
- ✈ The participant cannot change the orientation of the robot after seeing the path
- ✈ A maximum of four participants are allowed per team. Participants may be from different colleges as well
- ✈ No team is allowed to check their robot trials on the arena
- ✈ The selection into the next round is based upon the performance (time) in the previous round
- ✈ Judges decision is final

ROBO RACE

ROUNDS:
First round

Each bot will run individually and the points will be awarded on the basis of the number of checkpoints covered in the specified limit of time.

Second round

Two bots will compete with each other simultaneously and time taken will be recorded. The total time taken to complete the whole circuit (single lap) will be taken into consideration and only three teams who will complete the arena in the least time will be selected

GENERAL RULES

- Each team can have a maximum of 4 participants
- A team may consist of students from different colleges
- Certificate of excellence will be awarded to top three teams
- Bots should not be disassembled until the results are declared
- All students with a valid identity card of their respective colleges are eligible to participate in the event
- Bots built by participants are only allowed. (Ready kits are not allowed)
- Judges decision will be final

ROBO RACE

Awesome Racer bots made by awesome people race down the long path facing all the obstacles to reach their goal. The first one to reach wins. The event is conducted in several rounds. The arena can be of any type and it is so necessary that the robots be ready for that.

EVENT RULES

- In qualifying round, the bot has to pass through maximum number of checkpoints in a given time
- Slots are made available at the beginning of the game and no changes will be made further
- Various limitations to the path are made on the terrain so as to have a competition based on their design
- The bot completing the arena in least time will be declared as the winner
- Only 2 members of a team are allowed to control the bot during the race.
- The teams will have to take care of their stock of batteries. Organizers are not responsible for the availability of the batteries near the event location
- The bot will be disqualified if any part fails or falls off in the arena and is unable to continue