

# Hack2TechSustain







Organized by

Department of Computer Technology, MIT Campus, Anna University

In collaboration with





#### **CASH PRIZES**

1st: ₹50,000

2nd: ₹30,000

3rd: ₹15,000

## HACKATHON THEME: SUSTAINABILITY THROUGH INNOVATION

### **FOCUS THEMES**

GREEN ENERGY

**CYBERSECUTIY** 

NATURAL LANGUAGE PROCESSING

COMPUTER VISION

**INDUSTRY 4.0** 

# ROUND DETAILS

#### 1st Round: Idea Submission (Online):

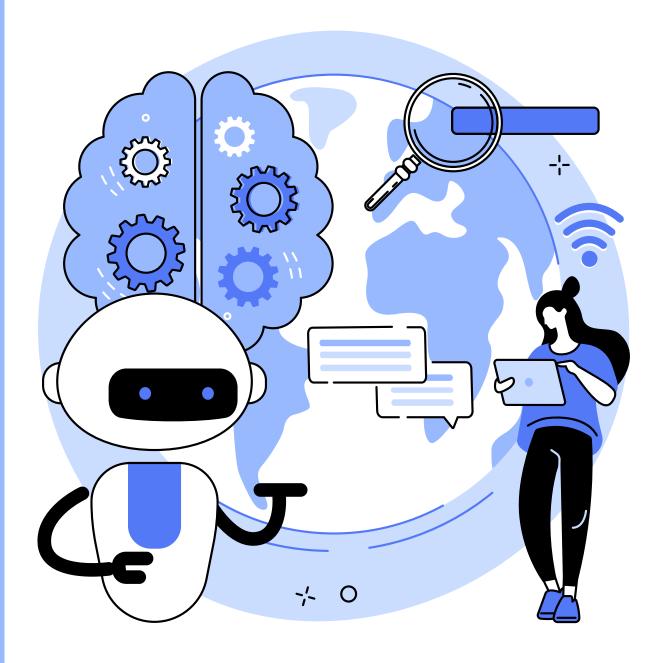
- Date: March 31, 2024
- Format: All registered teams will submit their initial ideas and proposals through the provided registration form.
- Selection: Teams whose ideas pass the initial review will advance to the next round.

#### 2nd Round: Idea Presentation (Online):

- Date: April 10, 2024
- Format: Selected teams will present their ideas online to a panel of judges.
- Selection: Teams with the most promising presentations will proceed to the final round.

#### **Final Round: Onsite Demo Day:**

- Date: April 26, 2024
- Location: DCT, MIT CAMPUS
- o Format: Finalist teams will participate in an onsite demo day.
- Objective: Teams will demonstrate their solutions in person to the judges and audience.



## REGISTRATION

To register for the hackathon and submit your ideas, visit: https://forms.gle/S8qKUwPTG5Nrn46L9

**Contact Information:** For inquiries and further information, contact us at:

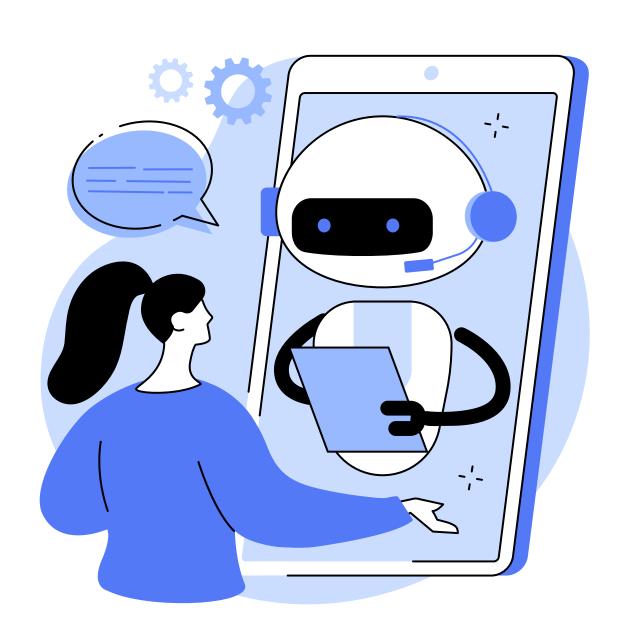
• Phone: +044-2251-6266

• Email: hack2techsustain@gmail.com

• Website: www.annauniv.edu/dct/techsus2024

#### **Cordinators:**

Dr. Kottilingam Kottursamy & Dr. T. Sudhakar Coordinators-Hack2TechSustain, 2024, Department of Computer Technology, MIT Campus, Anna University, Tamilnadu, India.



- Solutions to develop an intelligent transportation system that optimizes traffic flow, minimizes emissions and promotes eco-friendly commuting options to reduce the environmental impact of urban transportation.
- Solutions to Create an analytics platform for electric vehicle (EV) data, analyzing charging patterns, battery performance, and usage trends to optimize EV infrastructure, enhance charging efficiency, and promote widespread adoption of electric vehicles.
- Solutions to Implement a blockchain-based system to track and trace the entire food supply chain, ensuring transparency and accountability to enhance food safety, reduce contamination risks, and promote consumer confidence in the quality of food products.
- To Develop a computer vision solution for precision agriculture, enabling real-time crop monitoring, disease detection, and yield prediction to optimize farming practices, minimize resource usage, and promote sustainable agriculture.



- To Create an energy management system that leverages IoT devices and data analytics to optimize energy consumption, reduce wastage, and enhance the integration of renewable energy sources, contributing to a more sustainable and resilient energy infrastructure.
- To Implement an IoT-based solution for water conservation, monitoring and managing water usage in households, agriculture, and industries to reduce water wastage and promote sustainable water resource management.
- To Develop a natural language processing (NLP) application tailored for individuals with speech disorders, providing personalized therapy and communication assistance to enhance their ability to express themselves and engage with others effectively.
- To Invent a novel green energy technology, such as an advanced solar panel design, energy-efficient storage solutions, or innovative wind energy systems, to contribute to the expansion and improvement of sustainable energy sources

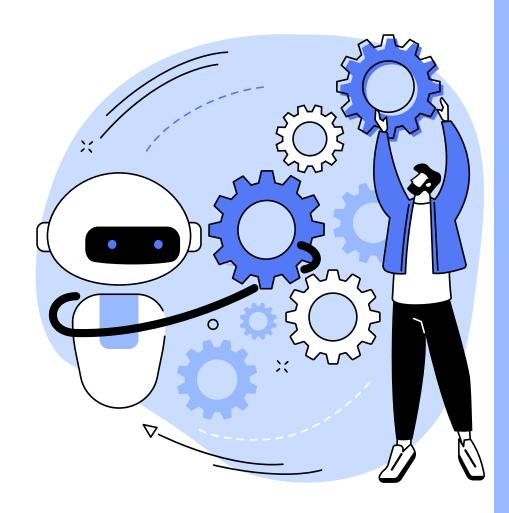


- To Design a customizable and affordable assistive technology solution that empowers individuals with physical disabilities, enabling them to control electronic devices, access information, and navigate their surroundings more independently.
- To Develop a comprehensive mental health support platform that utilizes AI-driven chatbots and virtual counselors to provide accessible and personalized mental health resources, therapy sessions, and coping mechanisms for individuals facing mental health challenges.
- To Create a navigation system leveraging computer vision and IoT for the visually impaired, offering real-time information about obstacles, landmarks, and safe pathways to enhance the independence and safety of blind individuals in both indoor and outdoor environments.
- To Build a communication tool based on NLP and AI that facilitates effective communication for non-verbal individuals, including those with autism or speech disorders, by translating gestures, expressions, or other forms of expression into meaningful language.



- To Develop an inclusive education platform that employs AI and adaptive learning technologies to cater to the unique learning needs of students with various disabilities, ensuring equal access to educational resources and opportunities.
- To Create an inclusive gaming platform that accommodates individuals with physical and cognitive disabilities, offering adaptive controls, visual/audio feedback, and game elements designed for an enjoyable gaming experience for everyone.
- To Develop a platform that utilizes NLP and AI to match job opportunities with the skills and abilities of individuals with disabilities, promoting inclusivity in the workforce and facilitating the recruitment process for both employers and candidates.
- To Design an IoT-based health monitoring system specifically tailored for individuals with disabilities, offering realtime health data tracking, medication reminders, and personalized health insights to improve overall well-being and independence.





## ROUND 1 PPT SUBMISSION FORMAT

Slide 1: Title Slide

**Hackathon Title:** [Hackathon Name]

**Team Name:** [Team Name]

**Team Members:** [List of Team Members]

**Contact Information:** 

**Email:** [Email Address]

Phone: [Phone Number]

**Slide 2: Problem Statement** 

Problem Statement: [Define the problem succinctly]

Significance: [Highlight the significance and impact of solving this problem]

**Slide 3: Proposed Solution** 

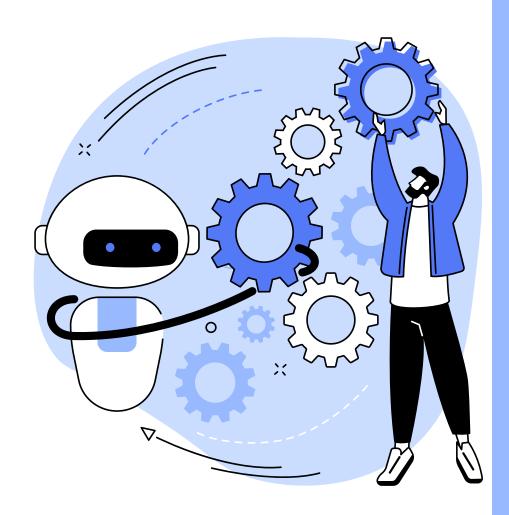
**Proposed Solution:** [Present your proposed solution or idea]

**Solution Description**: [Describe how your solution addresses the problem]

**Slide 4: Methodology** 

Methodology: [Outline the methodology or approach]

**Technologies:** [Highlight any key technologies or tools you plan to utilize]



## ROUND 1 PPT SUBMISSION FORMAT

**Slide 5: Expected Impact** 

**Expected Impact:** [Discuss the potential impact or benefits]

Metrics: [Include any metrics or indicators to measure success]

**Slide 6: Implementation Plan** 

**Implementation Plan:** [Provide a timeline or roadmap]

Milestones: [Include key milestones and deliverables]

**Slide 7: Team Expertise** 

**Team Expertise:** [Highlight the skills and expertise of your team members]

Qualifications: [Describe how your team is qualified to execute the proposed

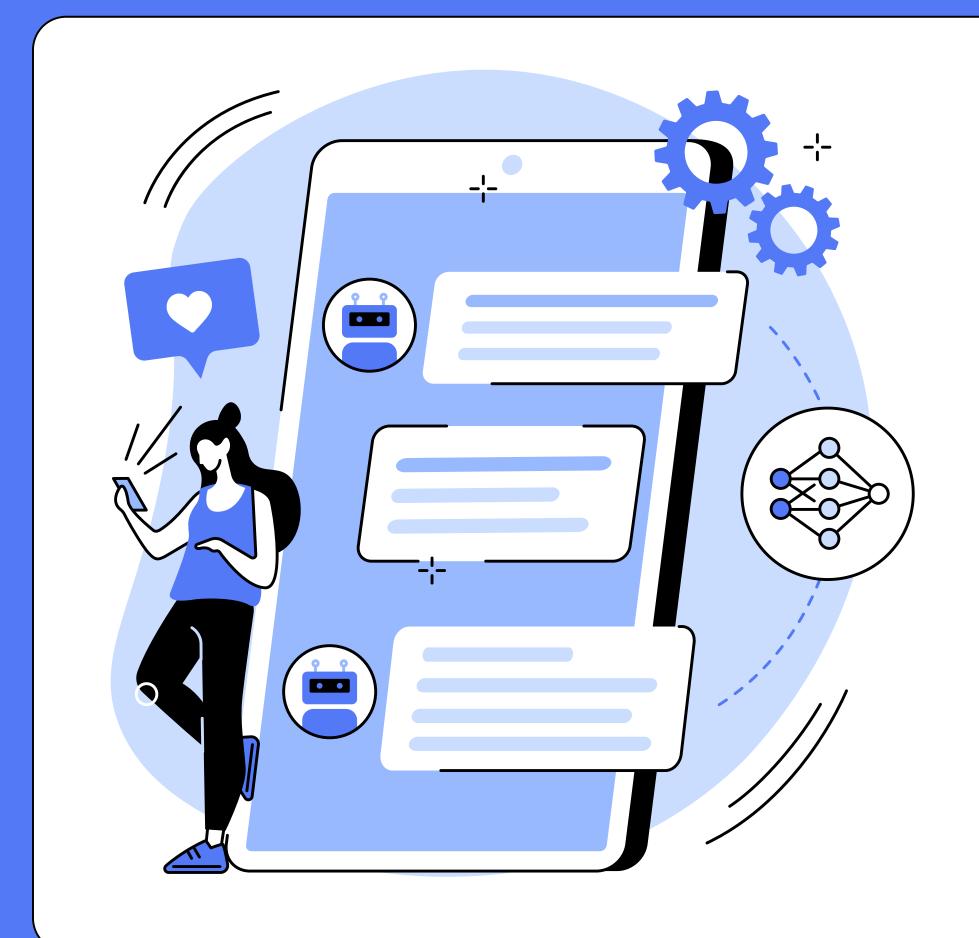
solution]

**Slide 8: Contact Information** 

**Contact Information:** 

**Email:** [Team Email Address]

Phone: [Team Phone Number]



# JOIN US IN SHAPING A SUSTAINABLE FUTURE THROUGH TECHNOLOGY INNOVATION!