Sri SAIRAM ENGINEERING COLLEGE
An Autonomous Institution
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DEPARTMENT OF ARTIFICIAL INTELLIGENCE AND DATA SCIENCE PRESENTS

DEPARTMENT OF ARTIFICIAL INTELLIGENCE & DATA SCIENCE

HACK TRONIX 1.0

CODE . CREATE . CONQUER

7 & 8 APRIL 2025

A 24 HOUR NATIONAL LEVEL HACKATHON

Sairam INSTITUTIONS

ABOUT

Welcome to HackTronix 1.0 – a 24-hour tech marathon where innovation meets determination. This hackathon helps in pushing boundaries, solving real-world problems, and turning ideas into reality. Whether you're an expert coder, a budding developer, or someone with a big idea, HackTronix 1.0 is the perfect platform to learn, collaborate, and create something incredible.

The Challenge

Within 24 hours, you and your team will design, and develop a functional prototype that tackles real-world challenges with problem statements covering both software and hardware, you have the freedom to explore:

- Artificial Intelligence & Machine Learning
- Robotics & IoT
- Cybersecurity & Blockchain
- AR/VR & Metaverse
- Smart Cities & Sustainable Tech
- FinTech, HealthTech, and EduTech

Why Join us?

Here's what's in store for you:

Industry mentors – Connect with industry experts, mentors, fellow innovators and get real-world guidance from tech experts.

Networking with peers & professionals -Meet like-minded hackers and potential future collaborators.

Compete for Exciting Prizes & recognition – A prize pool worth ₹25,500 awaits the best minds and get noticed by top leaders and recruiters.

Hands-on experience – Step out of the classroom and apply your skills to real-world problems.

Fast-Paced, High-Impact Experience – Build, prototype, and pitch your ideas in just 24 hours.

ROADMAP

March 12th

HackTronix 1.0 Launch

March 13th

Registrations Open

April 4th

Idea submission Deadline

April 5th

Announcement of Finalists

April 5th

Round 2, Registration starts

April 7th & 8th

Grand Finale of HackTronix 1.0

REGISTRATION RULES

1. Each team must have a minimum of 2 members and a maximum of 4 members.
2. Teams are allowed to select and work on only one problem statement.
3. Teams must upload the problem statement PPT and get approval during registration.
4. All solutions must be submitted before the specified deadline.
5. College students must bring their college ID card (photocopy accepted) for verification at the grand finale.
6. Communication must be conducted exclusively through the registered email ID.
7. Participants must acknowledge and accept these rules during registration.
8. The Last date of registration is 4th April 2025

PICK & SUBMIT

HT01 : Sustainable Technology

Develop an interactive platform that promotes eco-friendly habits. Implement a reward-based system where users earn points for sustainable actions. Integrate immersive technologies like AR/VR to enhance user engagement.

HT02 : Blockchain for Supply Chain

Develop a dual-blockchain solution: a private blockchain for secure supplier, manufacturer, and warehouse data management, and a public blockchain for transparent product tracking, real-time shipment updates, and automated payment settlements to enhance supply chain trust and efficiency.

HT03 : IoT & Smart Transportation

Implement a real-time vehicle-to-vehicle (V2V) communication system for safer and more efficient traffic management. Enable vehicles to exchange critical data on road conditions, traffic, and hazards. Improve road safety and optimize traffic flow for smart city applications.

HT04 : Autonomous Cybersecurity

Create an AI-driven cybersecurity solution for real-time IoT threat detection.
Implement self-healing mechanisms to isolate and recover compromised nodes.
Ensure scalable protection for heterogeneous networks with minimal downtime.

HT05 : Artificial Intelligence & Machine Learning

Explore AI-driven solutions to solve real-world problems.
Implement models for automation, prediction, or decision-making.
Utilize AI techniques like deep learning, NLP, computer vision, or reinforcement learning.
Optimize processes using AI-powered analytics and intelligent systems.
Innovate in fields like healthcare, finance, security, education, and more.

HT06 : Augmented Reality & Virtual Reality

Develop immersive AR/VR applications for real-world problem-solving.
Create interactive simulations, training modules, or entertainment experiences.
Integrate spatial computing for enhanced user engagement.
Explore AI-powered AR/VR solutions for education, healthcare, or industrial applications.

HT07 : Robotics & Automation

Build intelligent robotic systems for automation and efficiency.
Integrate AI and IoT for real-time decision-making in robotics.
Develop robotic applications for industries like healthcare, agriculture, and manufacturing.
Work on autonomous navigation, robotic vision, or human-robot interaction.

HT08 : Open Innovation & Disruptive Solutions

Solve real-world challenges with out-of-the-box thinking.
Develop groundbreaking solutions across any domain—tech, healthcare, sustainability, or education.
Integrate AI, blockchain, IoT, or any emerging technology to drive impact.
Focus on scalability, user experience, and innovation-driven problem-solving.

No boundaries. No limits. Just pure innovation!

SELECTION CRITERIA

The evaluation process for HackTronix 1.0 will be conducted in multiple phases, ensuring a fair and transparent selection of the best projects. Each submission will be assessed based on originality, technical execution, functionality, presentation, and documentation quality. The top 30 teams will be shortlisted for the final round, where judges will evaluate the working prototypes in person.

SELECTION PROCESS

ROUND 1 — PROJECT IDEA SUBMISSION (ONLINE)

- Teams must submit a well-structured Project Idea Proposal with a detailed presentation.
- Selection is based on originality, feasibility, technical relevance, and potential societal impact.
- The top 30 teams will be shortlisted for the next round.

ROUND 2 — GRAND FINALE (IN-PERSON EVALUATION)

- All projects must be developed during the 24-hour hackathon; pre-existing projects or plagiarized work will lead to immediate disqualification.
- Teams must adhere to the submission deadlines for each round.
- Participants must use their registered email ID for all official communications.
- Teams using GitHub for version control may earn extra bonus points.
- Projects are evaluated based on a structured scoring system, and final winners are selected.

JUDGING CRITERIA & SCORING

Each project will be evaluated based on the following five key parameters, contributing to the overall score

1. Innovation & Uniqueness (25%)

- Creativity and originality of the idea.
- Novelty in approach compared to existing solutions.
- Potential for breakthrough innovation in the selected domain.

2. Technical Implementation (20%)

- Complexity and sophistication of the technology stack used.
- Efficiency of algorithms, AI models, or hardware integration.
- Use of industry-standard frameworks, APIs, and development tools.

3. Functionality & Working Prototype (25%)

- The completeness and usability of the solution.
- How well the prototype performs in real-world scenarios.
- Proper handling of data, security, and edge cases.
- Seamless hardware-software integration for IoT/robotics projects.

4. Presentation & Impact on Society (20%)

- Clarity and persuasiveness of the pitch/demo.
- Real-world applicability and impact on society or industry.
- How effectively the solution addresses the selected problem statement.

5. Code Quality & Documentation (10%)

- Code structure, readability, and efficiency.
- Quality of technical documentation, including architecture diagrams and setup guides.

Final Decision

- The final scores will be aggregated based on the above criteria, and the top-scoring teams will be declared winners.
- In case of a tie, the team with the higher impact and functionality score will be ranked higher.
- Judges' decisions will be final and binding, with no further disputes entertained.

Bonus Points

- Teams demonstrating exceptional collaboration and adaptability may receive additional recognition.
- Effective use of open-source contributions or public data sources can be a plus.

GENERAL INFORMATION

GENERAL RULES :

- Each team must consist of a minimum of 2 members and a maximum of 4 members.
- Teams are allowed to select and work on only one problem statement.
- All solutions must be submitted before the specified deadline.
- Any form of plagiarism will result in immediate disqualification of the team.
- At least two participants from the registered team must be physically present for the grand finale round.
- Mentors are not considered part of the team.
- Participants are responsible for the safety and security of their personal belongings.
- Participants must maintain cleanliness, follow a proper dress code, and uphold discipline at the venue.
- Travel expenses must be borne by the participants.
- The event will take place from 8:00 AM on April 7th to 4:00 PM on April 8th IST. Participants should plan their timelines accordingly.
- If the chosen problem statement requires hardware components, participants must bring their own as the organizing team will not provide any hardware.
- College students must bring their college ID card (a photocopy is acceptable) for verification at the grand finale.
- All project work must be completed during the Hackathon, and the code repository must be initialized at the start of the event.
- Teams are permitted to use libraries, frameworks, and open-source code, but pre-developed projects or open-sourced solutions specifically created for this event are not allowed.
- Product development must cease once the allotted time is over. Minor debugging and fixes are permitted post-deadline.
- The organizers reserve the right to disqualify any team for violating rules, displaying unsporting behavior, or breaching the code of conduct.
- The Hackathon judging criteria will be disclosed one hour before the event begins.
- In case of any disputes, the final decision will rest with the organizers.
- Participants must follow the official social media channels to stay updated and qualify for the grand finale.

PRIZES

PRIZE POOL OF

₹ 25,000+

10,000

1ST

7,500

2ND

5,000

3RD

BEST INNOVATION IDEA

2,000

RULES & REGULATIONS

COMPLIANCE AND ENFORCEMENT :

- Failure to adhere to the below mentioned rules may result in warnings, penalties, or disqualification.
- The organizing committee reserves the right to modify the rules if necessary, with prior notification to the participants.
- Participants must acknowledge and accept these rules before registering for the event.

HACKTRONIX 1.0 RULES :

- Teams must upload the problem statement PPT and obtain approval during registration.
- Any form of plagiarism will lead to immediate disqualification.
- Sharing project-related information outside the team is strictly prohibited. Violations may result in disqualification.
- Teams or individuals may bring a faculty member (optional).
- Participants may select a mentor (optional).
- All project phases must be completed and submitted within the given deadlines.
- Communication must only occur via the registered email ID.
- From all registered teams, the top 30 teams will advance to the grand finale.
- Bonus points will be awarded for proper version control on GitHub.
- Teams must follow the provided PPT template for submissions.
- Participants must regularly check the HackTronix 1.0 website for updates.
- Teams interested in donating their projects for public use are welcome to do so.

CONTACT US

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