



# KKR&KSR Institute of Technology and Sciences Vinjanampadu, Guntur, Andhra Pradesh-522017

Approved by AICTE, New Delhi and Permanent Affiliation from JNTUK, Kakinada Accredited with "A" Grade by NAAC & NBA Accreditation Status for 4 UG (CSE, ECE, EEE, ME) Programs

Conducted 24 Hours Hackathon on Robotics @ 20/11/2023 in Association with Hackbots, Hyderabad.

#### **About the Hackathon:**

Robotics hackathons are intense events where teams or individuals gather to innovate in robotics technology. Participants, including engineers, programmers, and designers, collaborate to develop prototypes or software for robotic systems. These hackathons span industries from manufacturing to healthcare, aiming to solve specific challenges or explore new applications. Projects range from building physical robots to developing algorithms for autonomy and machine learning. The events foster creativity, learning, and networking within the robotics community. Workshops and mentorship opportunities are common features, aiding participants in overcoming technical hurdles. Expert presentations offer insights and inspiration for project development. Overall, robotics hackathons are hubs for pushing the boundaries of robotics innovation. They provide a platform for enthusiasts and professionals to contribute to the field's advancement.

## About the Chief Guest: Mahan Rk ( HackBots, CEO )

Mr. Mahaan Rk GARU, accomplished Robotics Product Research Engineer with a decade of experience in the field. His proficiency is deeply rooted in the fascinating territory of Robotics product research and development. In the domain of entertainment, he is a master of animatronics, skillfully crafting lifelike Robotic characters and creatures. Furthermore, his expertise in show control systems for amusement parks empowers him to artfully synchronize a multitude of elements





during live shows, including Robotics, audio, lighting, and special effects, creating truly mesmerizing experiences. Over the course of his distinguished career, sir has led numerous groundbreaking projects, redefining the possibilities in Robotic systems. Notably, sir is a proud member of the Indian Association of Amusement Parks and Industries and the All-India Robotic Association. Widely recognized as one of the country's most accomplished Imagineers. We are very happy to have sir as a resource person for our 6-day workshop.

## **Objectives of the Hackathon:**

- Encouraging innovation: Hackathons provide a platform for participants to explore new ideas and develop innovative solutions using robotics technology.
- 2. Problem-solving: Participants work on real-world challenges, aiming to find practical solutions that address specific problems in various industries or domains.
- 3. Collaboration: Hackathons foster teamwork and collaboration among participants with diverse backgrounds, including engineers, programmers, designers, and domain experts.
- 4. Skill development: Participants can enhance their technical skills in robotics, programming, hardware development, and problem-solving.
- 5. Networking: Hackathons bring together like-minded individuals, allowing participants to network with peers, mentors, and industry professionals.
- 6. Prototyping: Participants create prototypes or proof-of-concept demonstrations to showcase their ideas and solutions within a limited time frame.
- 7. Learning: Hackathons offer workshops, tutorials, and mentorship sessions, enabling participants to learn new tools, techniques, and best practices in robotics development.
- 8. Exploration: Hackathons encourage participants to explore new applications and use cases for robotics technology, pushing the boundaries of what is possible.





**2.Venue of the Event:** The event is organized on campus and conducted by KKR & KSR Institute of Technology and Sciences, Vinjanampadu, Guntur, Andhra Pradesh in association with SPARK

3. Date & Time of the Event: The Event is organized

4.No. of students participated: 210

**5.No. of faculties participated:** 7

6.Event photographs.

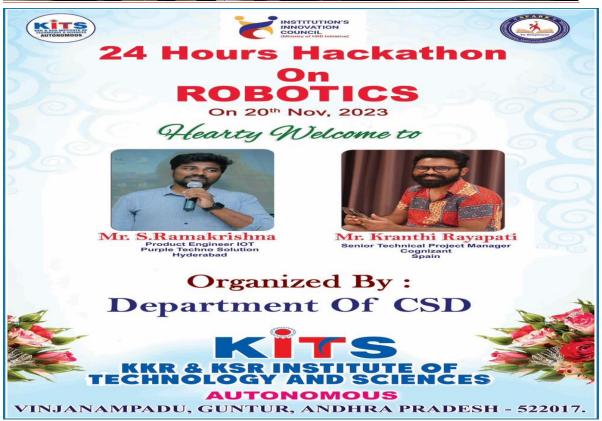


VINJANAMPADU, GUNTUR, ANDHRA PRADESH - 522017.





















#### 7.Benefits in terms of learning/Skill/Knowledge obtained:

- 1. **Technical Skills Enhancement**: Hackathons provide hands-on experience in robotics development, programming, hardware integration, and problem-solving, allowing participants to enhance their technical skills.
- 2. Exposure to New Technologies: Participants can work with cutting-edge technologies and tools in robotics, gaining exposure to new platforms, sensors, actuators, and software frameworks.
- 3. **Collaborative Learning:** Working in teams with individuals from diverse backgrounds fosters collaborative learning, as participants share knowledge, expertise, and best practices in robotics development.
- 4. **Problem-Solving Abilities**: Hackathons present real-world challenges that require creative and innovative solutions, helping participants improve their problem-solving abilities and critical thinking skills.
- 5. **Rapid Prototyping**: Within a limited time, frame, participants learn to rapidly prototype and iterate on their ideas, honing their ability to develop functional prototypes quickly and efficiently.
- 6. Adaptability and Flexibility: Hackathons often involve working under pressure and adapting to changing requirements, helping participants develop adaptability, flexibility, and resilience in fast-paced environments.
- 7. Feedback and Iteration: Participants receive feedback from mentors, peers, and judges throughout the hackathon, enabling them to iterate on their designs and improve their solutions based on constructive criticism.





# 3. Promotion of the Event on the Social Media Website: (Link and Screenshot):

https://www.instagram.com/p/Cz-EqBFJJGu/?utm\_source=ig\_web\_copy\_link&igsh=MzRlODBiNWFlZA ==









- 2. Expenditure Amount (If any): Nil
- 3. Remarks: The event is organized smoothly with practical orientation.
- **4. Experiences and Output of the Session Personal Projects**: Full-stack developers can independently work on personal projects from start to finish, bringing their ideas to life without relying on others. This autonomy is empowering and allows for creative exploration. Continuous Learning: The tech industry is constantly evolving, and full-stack developers need to stay updated with the latest trends and technologies in both front-end and back-end development. This encourages a culture of continuous learning and self-improvement. Better Communication Skills: Interacting with different teams and stakeholders necessitates effective communication. Full-stack developers develop strong communication skills, which are valuable in various aspects of their professional life. In summary, learning full-stack web development empowers individuals with the skills to create complete web applications, fosters adaptability, problem-solving abilities, and communication skills, and opens diverse career opportunities in the tech industry.