LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING
(AUTONOMOUS)
Accredited by NAAC with 'A' Grade
An ISO 21001:2018,14001:2015,50001:2018 Certified Institution
Approved by AICTE, New Delhi and Affiliated to JNTUK, Kakinada
L.B. REDDY NAGAR, MYLAVARAM, NTR DIST., A.P.-521 230.
hodcsm@lbrce.ac.in, csmoffice@lbrce.ac.in, Phone: 08659-222 933, Fax: 08659-222931
DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING (AI&ML)

"Report on
Three Days Workshop on IoT with Arduino/Raspberry Pi-Pico"

Event Type	: Workshop
Date	: 18th April – 20th April 2024
Venue	: **Machine Learning Lab , First Floor,1F11**
Resource Person(s)	: **Mr.P.Ashok Chakravarthy,** Founder & CEO,SLABS
Name of the Convener	: **Dr.S.Jayaprada**, Head Of the Department CSE(AI&ML)
Name of the Co-ordinators(s)	: **Dr.Shaik Jameer,**Sr. Asst.Prof, Dept of CSE(AI&ML) **Mrs.Razeena Begum**, Sr.Asst. Prof, Dept of CSE(AI&ML)
In Association With	: **SLABS,Guntur**
Targeted Audience	: B.Tech IV Sem CSE(AI&ML) Students, 2 Faculty members
Total No.of Students	: 71 Students

Objective of the Event :

Objective of this workshop is to provide the students with valuable insights and practical experience in the burgeoning field of IoT. This workshop will include interactive sessions, hands-on projects and engaging discussions with industry experts, enabling the students need a start to master the hardware and the basic functionality to convert their ideas into reality and then to a product that contributes something innovative to the society at large,so easy that a newbie can learn and grow with the technology on the fly.

Learning Objective of the event :

➢ **Introduction to IoT Technologies:** Participants will learn about the core technologies that constitute IoT systems, including sensors, actuators, communication protocols, and cloud platforms.

➢ **IoT System Design and Architecture**: Attendees will acquire knowledge about designing and architecting IoT systems, including considerations for scalability, security, interoperability, and data management.

➢ **Hands-on Experience with IoT Devices:** The event will provide practical sessions where participants can work with IoT hardware and software components, enabling them to build, program, and deploy IoT solutions.

➢ **Real-world Applications of IoT:** Through case studies and examples, participants will explore various industry applications of IoT, such as smart cities, industrial automation, healthcare, agriculture, and consumer electronics, gaining insights into how IoT technology is transforming different sectors.

## Description of the event :

Day1: 18-04-2024

- Workshop was inaugurated on 18/04/2024 by **Dr.S.Jayaprada**, HOD CSE(AI&ML), Convener of the workshop, along with **Mr.P.Ashok Chakravarthy**, Resource Person, Slabs, Founder & CEO,Coordinators of the workshop and all the teaching staff of CSE(AI&ML).

- Coordinators of the Workshop, **Dr.Shaik Jameer** and **Mrs.Razeena Begum** welcomed all the dignitaries and delegates. In the welcome speech, the importance and objectives of organizing this Workshop were highlighted. The convener of the Workshop, **Dr. S.Jayaprada** started the speech by thanking LBRCE Management and congratulating all the participants who registered for this workshop. Then she thanked the Resource Person **Mr.P.Ashok Chakravarthy** and his Team, for accepting our request irrespective of his busy schedule. They added the importance of IoT using Arduino & Raspberry Pi-Pico. She suggested all the students should utilize this opportunity, which will help them in identifying/doing projects in IoT.

- Resource Person **Mr.P.Ashok Chakravarthy** started this workshop and explained IoT Basics, The Future of IoT, few applications of IoT, Challenges of IoT, IoT Architecture, Server, Gateway, Processor, Controller, Mobile Application.

- Resource Person **Mr.P.Ashok Chakravarthy** and his team handled hands-on sessions for the Future of IoT.

-

Day2: 19-04-2024

- Resource Person **Mr.P.Ashok Chakravarthy** covered few applications of IoT, Challenges of IoT, IoT Architecture.
- Resource Person **Mr.P.Ashok Chakravarthy** and his team handled hands-on sessions on Mobile Application.
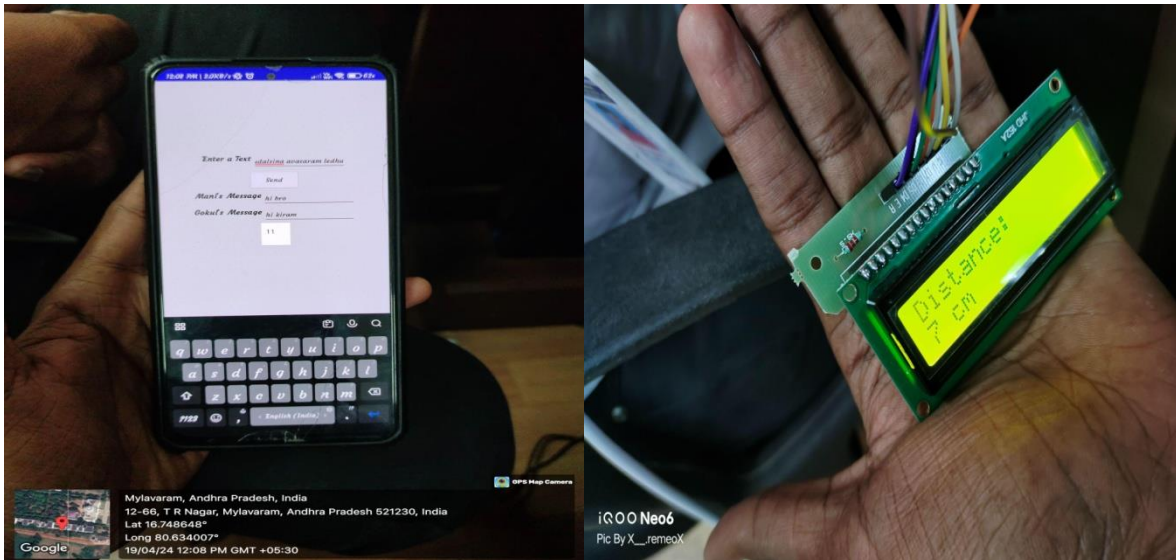
Day 3: 20-04-2024

●   Resource Person **Mr.P.Ashok Chakravarthy** covered Server, Gateway, Processor, Controller.

●   Resource Person **Mr.P.Ashok Chakravarthy** and his team handled hands-on sessions on Picking Up a real-World problems such as smart cities, industrial automation, healthcare, agriculture, and consumer electronics, gaining insights into how IoT technology is transforming different sectors.

Mylavaram, Andhra Pradesh, India
12-66, T R Nagar, Mylavaram, Andhra Pradesh 521230, India
Lat 16.748626°
Long 80.633975°
20/04/24 04:40 PM GMT +05:30

Impact Analysis :

● **Economic Boost:** IoT drives growth by improving efficiency and creating new revenue streams. Social Advancements: Enhances safety, healthcare, and urban living standards.

● **Environmental Concerns:** Balancing benefits with energy consumption and waste management. Security Risks: Vulnerabilities in networks and data privacy issues.

● **Workforce Changes:** Requires new skills while impacting job roles. Regulatory Challenges: Addressing data ownership, consent, and ethical use.

Feedback & Suggestions:

Clarity and Structure: Your questions and requests are clear, making it easier to assist you.

Specificity: Providing specific details about your requirements helps in providing more accurate assistance. Grammar and Spelling: Pay attention to grammar and spelling to ensure clarity and professionalism in your communications.

Organization: Structuring your questions and responses in a clear and organized manner can improve readability and understanding.

Feedback on Assistance: Providing feedback on the assistance you receive can help tailor future responses to better meet your needs.

Open-ended Questions: Consider asking open-ended questions to encourage deeper discussion and exploration of topics.Clarity and Structure: Your questions and requests are clear, making it easier to assist you.

Specificity: Providing specific details about your requirements helps in providing more accurate assistance. Grammar and Spelling: Pay attention to grammar and spelling to ensure clarity and professionalism in your communications.

Organization: Structuring your questions and responses in a clear and organized manner can improve readability and understanding. Feedback on Assistance: Providing feedback on the assistance you receive can help tailor future responses to better meet your needs. Open-ended Questions: Consider asking open-ended questions to encourage deeper discussion and exploration of topics.

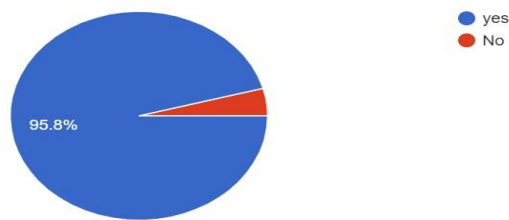## FEEDBACK RESPONSES FROM ALL THE PARTICIPANTS:

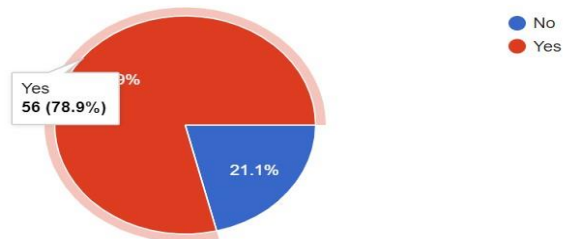1) Were the objectives of the workshop clearly defined and communicated?

71 responses

- very unsatisfied
- unsatisfied
- neutral
- satisfied
- very satisfied

47.9%
29.6%
19.7%
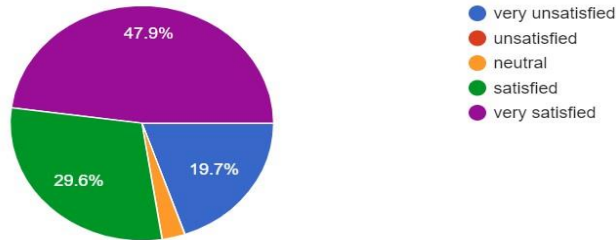
2) Was the information presented easy to understand?

71 responses

- yes
- No

95.8%

3) Do you feel the topics covered were new and insightful?

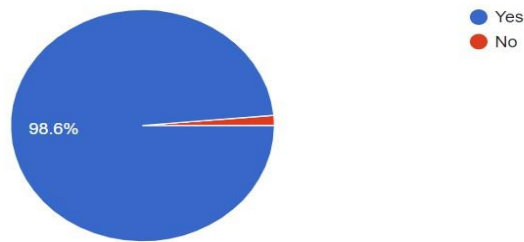71 responses

- No
- Yes

Yes
56 (78.9%)
21.1%

4) Did the facilitator effectively engage the students?
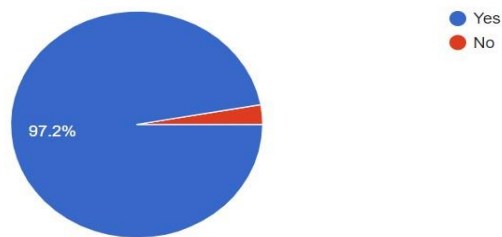
71 responses

- Yes
- No

98.6%
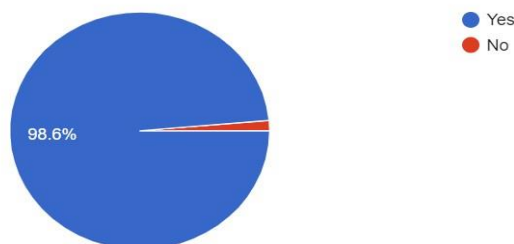
5) Were you encouraged to engage and interact during the workshop?
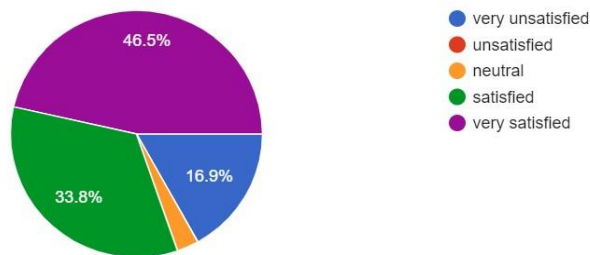
71 responses

- Yes
- No

98.6%

6) Did the facilitator make effective use of real-world examples?

71 responses

- Yes
- No

97.2%

7) How well did the facilitator respond to questions or concerns?

71 responses

- very unsatisfied
- unsatisfied
- neutral
- satisfied
- very satisfied

46.5%

16.9%

33.8%

SUGGESTIONS:

- Make lectures interactive with discussions and hands-on activities.
- Use real-world examples to illustrate IoT concepts.
- Assign practical projects and programming exercises.
- Provide timely feedback on assignments and participation.
- Invite guest speakers for industry insights.
- Offer flexible learning options and resources.
- Keep content relevant with current IoT trends.
- Ensure easy access to course materials and support.
- Encourage student exploration and creativity.
- Seek and act on student feedback for continuous improvement.

OUTCOME OF THE EVENT:

- Increased awareness and understanding of IoT technologies.
- Enhanced skills in IoT development and implementation.
- Collaboration opportunities among participants and industry experts.
- Exploration of emerging IoT trends and applications.
- Potential for innovative solutions and projects in various domains.
- Networking and knowledge-sharing among attendees.
- Inspiration for future research and career paths in IoT.

Co-ordinators

Convener

HEAD OF THE DEPARTMENT
COMPUTER SCIENCE AND ENGINEERING (AI & ML)
LAKIREDDY BALIREDDY COLLEGE OF ENGINEERING
MYLAVARAM-521 230. NTR DT