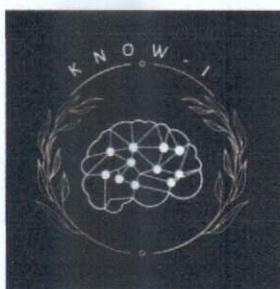




## **KNOW – I**

### **DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



## **Reflection Report on**

### **“HANDS ON WORKSHOP ON XAI/RAI AND NLP”**

**Venue : CS LAB 8**

**Date : 30<sup>th</sup> September 2024**

**Time : 9.00 A.M to 3:00 P.M**

#### **Coordinators**

1. Mrs. R. K. Kapilavani, AP/CSE
2. Mrs. V. Radha, AP/CSE

#### **Convener**

**Dr. R. Anitha, Professor & HoD/CSE**



## **OBJECTIVES**

To provide students with practical, hands-on experience in Explainable AI (XAI), Responsible AI (RAI), and Natural Language Processing (NLP), enabling them to understand key concepts, explore real-world applications, and appreciate the significance of ethics and transparency in modern AI systems.

## **CIRCULAR**

Greetings from Know-I

We are just days away from the Hands-on Workshop on XAI/RAI and NLP, organized by Know-I, dedicated to advancing knowledge in AI and machine learning.

Join us for this exclusive event, where we will dive deep into Explainable AI (XAI), Responsible AI (RAI), and the rapidly evolving world of Natural Language Processing (NLP). We are honored to have Mr. Raj Arun, a distinguished expert in AI and NLP, as our special guest and workshop instructor, leading us through thought-provoking discussions and hands-on sessions.


Date : 30.09.2024

Venue : CSLAB8

Timings : 9.00 am to 3.00 pm



## INVITATION




DEPARTMENT OF COMPUTER SCIENCE AND  
ENGINEERING

**KNOW-I**  
presents

**HANDS ON WORKSHOP ON  
XAI/RAI AND NLP**

BY: Mr. RAJ ARUN


 SVCE  
Sri Venkateswara  
College of  
Engineering


Q XAI/RAI Nlp Chatbots ×


How far can XAI/RAI improve chatbot reliability?

Can LSTM/RNN overcome contextual limitations?

Will hybrid models revolutionize NLP?


 Certificates will be provided

 30/09/2024, Monday

 9:00 AM to 3:00 PM

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**REGISTER NOW!!**



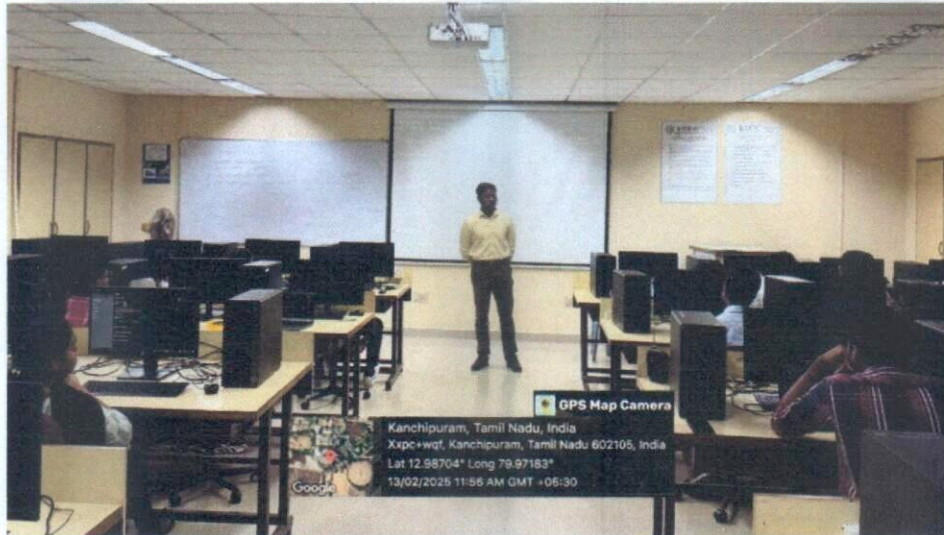


## AGENDA

TIME	EVENT
9:20 AM	Assembling of Participants
9:30 AM	Commencement of Event
9:35 AM	Welcome Address by Ms. Dhikshitha, Operations Executive
9:40 AM	Club Coordinator Address by Ms. R.K. Kapilavani/AP/CSE
9:50 AM	HOD Address by Dr. R. Anitha
9:55 AM	Introduction of Chief Guest by Mr. G. Thirukumaran
10:00 AM	Commencement of Workshop by Mr. Rajarjun
12:00 PM	Lunch Break
12:45 PM	Workshop Resumes
2:55 PM	Vote of Thanks by Mr. Aravindhan S.S., Treasurer
3:00 PM	Event Closure



## SPEAKER PROFILE WITH PHOTOGRAPH



Mr. Raj Arun, a trailblazer in the AI industry, currently serves as the Lead Architect at Fractal. With his deep expertise in Generative AI, he has played a pivotal role in pioneering transformative AI solutions that empower organizations to harness the power of advanced analytics and data-driven decision-making. Mr. Arun's leadership is marked by a strong focus on integrating Responsible AI principles, ensuring that technological advancements are paired with ethical considerations, and driving impactful innovation across industries. Notably, Mr. Arun's contributions to AI include three patents in the fields of cognitive analytics and autonomous intelligence, which highlight his relentless pursuit of cutting-edge research and development. His commitment to pushing the boundaries of AI is reflected in his ability to navigate complex technological landscapes while keeping societal implications in mind. In addition to his stellar achievements in AI, Mr. Arun possesses specializations in Blockchain technology from prestigious institutions such as IIT Madras and IIT Guwahati, demonstrating his profound grasp of emerging technologies. As a certified Qiskit Developer from IBM, he is actively exploring the fascinating frontiers of quantum computing, contributing to the future of computational intelligence. An author and thought leader in the realm of Generative AI, Mr. Arun remains dedicated to disseminating his knowledge, fostering a culture of lifelong learning, and ensuring that the transformative potential of AI and ML benefits both organizations and the wider society.



## REFLECTION REPORT

### INTRODUCTION

The workshop commenced promptly at 9:30 AM with the assembling of participants, followed by a warm and gracious welcome by Ms. Dhikshitha, Operations Executive, who set the tone for the day. The Club Coordinator, Ms. R.K. Kapilavani, delivered an insightful address, highlighting the mission and ongoing activities of the Know-I club, emphasizing the club's unwavering commitment to fostering intellectual growth in the field of Artificial Intelligence (AI) and Machine Learning (ML).

Following the coordinator's address, the Head of the Department (HOD), Dr. R. Anitha, enlightened the audience with an inspiring speech on the critical importance of such workshops for both the academic and holistic development of the students. She underscored how the practical exposure to emerging technologies like AI and ML can equip students with the skills needed to excel in their careers.

At 9:55 AM, Mr. G. Thirukumaran took the stage to formally introduce the Chief Guest, Mr. Rajarjun, a prominent figure in the AI domain with extensive expertise in current trends and innovations. His introduction lauded the Chief Guest's profound knowledge and contributions to AI, and it set high expectations for the upcoming session.





## Core Tenets of Artificial Intelligence and Mathematical Frameworks

The workshop commenced at 10:00 AM, as Mr. Rajarjun captivated participants with an engaging introduction to cutting-edge trends in AI and ML, shedding light on current advancements and anticipated innovations. His skill in connecting these insights to tangible, real-world applications instantly resonated with the audience. Adopting an interactive approach, Mr. Rajarjun invited participants to share their expectations, aligning with their interest in mastering AI and ML fundamentals—a perfect match for the day's agenda. This immersive and participatory style laid a solid foundation for a dynamic learning experience. The workshop then transitioned into a hands-on tutorial on setting up GitHub, emphasizing the critical role of version control in collaborative AI projects. Following this, Mr. Rajarjun seamlessly guided participants through the mathematical essentials underpinning AI, delivering lucid demonstrations of key topics such as vectors, scalars, dot and cross products, matrix operations, element-wise multiplication, data visualization, arrays, and calculus principles like integration and differentiation. Each concept was presented with clarity and depth, enabling even novice participants to confidently engage. Attendees followed along by writing code and transforming abstract theory into actionable insights.



After a break, participants reconvened at 12:45 PM for the workshop's second part, which took an applied, hands-on approach. Mr. Rajarjun masterfully led participants in constructing a simple feedforward neural network, weaving together their newly acquired understanding of vectors, matrices, and differentiation, essential for the



training and backpropagation processes in neural networks..Mr. Rajarjun's adeptness at deconstructing intricate processes into digestible steps made the workshop both intellectually stimulating and accessible, leaving participants highly inspired and informed.

### **OUTCOME**

40 students participated in the session and learned a lot about AI, especially Explainable AI, Responsible AI, and Natural Language Processing. As they gained a deeper grasp of how ethical and interpretable AI systems are created and used in real-world situations, the workshop assisted them in developing practical skills

### **CONCLUSION**

In conclusion, the workshop proved to be an exceptional blend of theoretical foundations and practical applications, providing participants with a solid grasp of AI and ML concepts as well as hands-on experience in building neural networks. Mr. Rajarjun's expertise and interactive teaching style allowed participants to actively engage and experiment, fostering both confidence and creativity in approaching complex AI-driven tasks. At the end of the workshop, certificates of participation were awarded to all attendees, acknowledging their dedication and enthusiasm in advancing their AI and ML skills.

### **VOTE OF THANKS**

The workshop culminated with a thoughtful Vote of Thanks delivered by Mr. Aravindhan S.S., Treasurer, who expressed sincere gratitude to Mr. Rajarjun for his enlightening session and to the faculty, staff, and students for their active participation and support. His closing remarks highlighted the tremendous success of the workshop in imparting foundational AI knowledge and sparking curiosity among participants.

*Rkllap Na*  
7/10/24  
**CLUB COORDINATOR**

*[Signature]*  
**HoD/CSE**