XAVIER INSTITUTE OF ENGINEERING

Mahim, Mumbai 400016

Department of Information Technology

(NBA Accredited)

(Approved by AICTE, Govt. of Maharashtra and Affiliated to University of Mumbai)

Title of the event: "Guest lecture on Knowledge representation technologies"

Event Date / Time: 27/03/2023 8.45 AM

Event Coordinators: Chhaya Dhavale

Details of Resource Person: Dr. Ujwala Bharambe

No. of Participants: 32   **Class/Semester:** TEIT /VI

Objectives: To address current trends in knowledge representation by companies like google and introduce the students for evolving areas for further research.

Description: Dr. Ujwala Bharambe introduced with the Intelligence terminology and what are ways to achieve those. Why we need: Knowledge Representation Types of knowledge, factual knowledge, procedural knowledge and so on. Knowledge Representation and Reasoning: Ontology and Knowledge Graph.

Declarative Knowledge: Declarative knowledge is to know about something. It includes concepts, facts, and objects.
Procedural Knowledge-Procedural knowledge is a type of knowledge which is responsible for knowing how to do something.
Heuristic knowledge: Heuristic knowledge is rules of thumb based on previous experiences, awareness of approaches, and which are good to work but not guaranteed.
Structural knowledge: Structural knowledge is basic knowledge to problem-solving. It describes the relationship that exists between concepts or objects.

Just as humans encode and store information in memory, AI systems can use ontologies to encode and store domain-specific knowledge in memory. This knowledge can then be retrieved and used by the system when needed, such as when answering a question or making a decision.
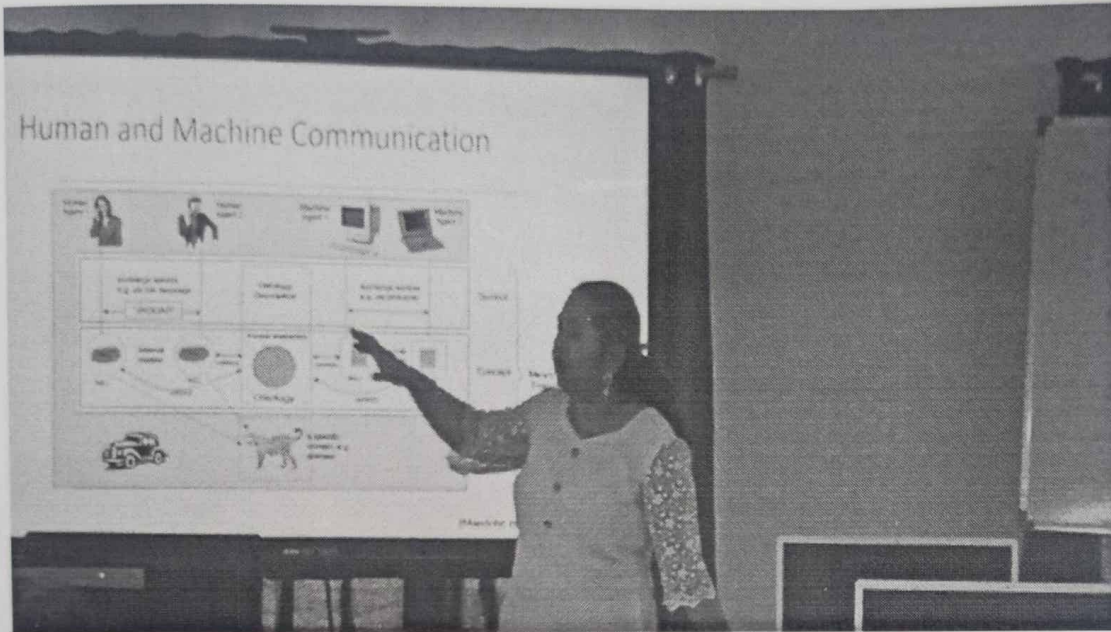She gave overview of many frameworks which are available for knowledge representation such as knowledge graph, Neo4J, ontology OWL, XML. Students enjoyed her session with lively interaction and questions.

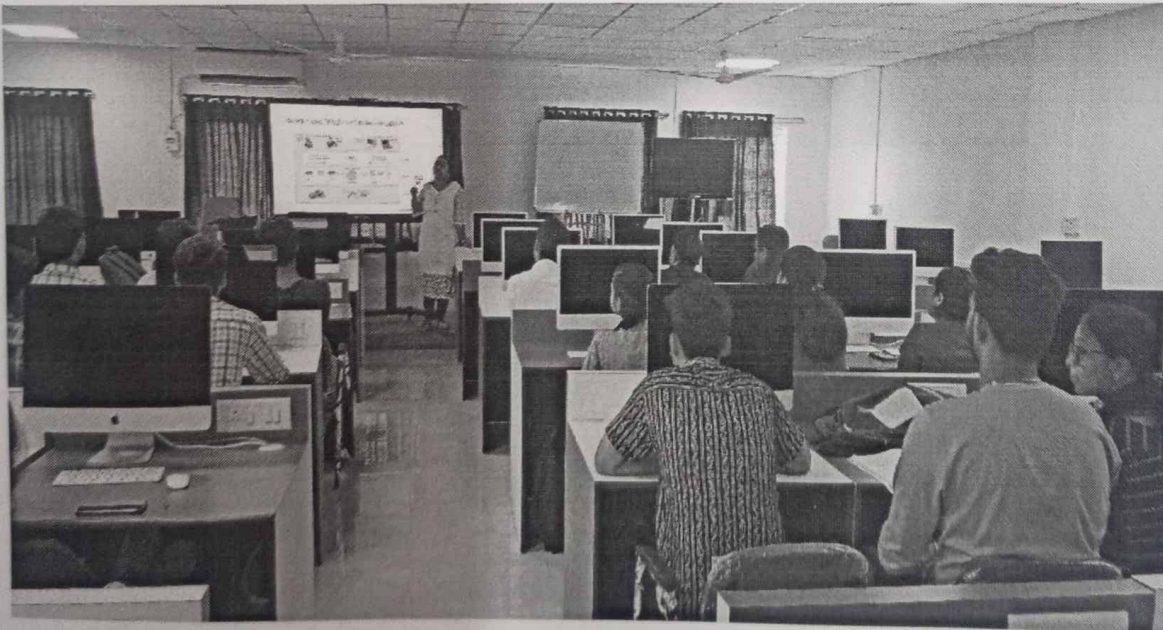**COs / LOs achieved (if any):**CO1, CO2, CO3, CO4,CO5,CO6
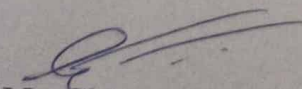
POs achieved: PO1, PO2, PO3, PO4, PO5, PO6,PO8,PO10,PO12
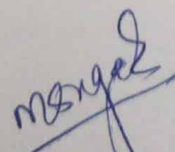
PSOs achieved: PSO1,PSO2
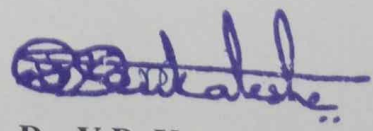
Event Photos:

Dr Ujwala explaining how machine understand the way human communicate

Ms. Chhaya Dhavale

Event Coordinator

Ms. Meena Ugale

HOD-IT

Dr. Y.D. Venkatesh

Principal