



Jansons Institute of Technology

Karumathampatti, Coimbatore – 641 659
Approved by AICTE and Affiliated to Anna University
An ISO 9001:2015 certified institution

Industry Readiness Course - Syllabus Department of Computer Science and Engineering Insight into AI and its Applications 2021 - 2022 ODD SEMESTER

Course Objectives:

- To conceptualize the basic ideas and techniques underlying the design of intelligent systems.
- To make participants understand and Explore the mechanism of mind that enable intelligent thought and action.
- To make participants understand how to deal with uncertain and incomplete information.

Course Outcomes:

- Ability to develop a basic understanding of Artificial Intelligence
- Ability to analyze the strength and weaknesses of AI approaches to knowledge– intensive problem solving.
- Ability to design and develop the AI applications
- Replicate the knowledge of AI, Deep and Machine learning with students..

Syllabus:

Module I: Fundamentals of Artificial Intelligence

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Introduction, A.I. Representation, Non-AI & AI Techniques, Representation of Knowledge, KnowledgeBase Systems, State Space Search, Production Systems, Problem Characteristics, types of production systems, Intelligent Agents and Environments, concept of rationality, the nature of environments, structure of agents, problem solving agents, problem formulation.

Module II: Uninformed Search Strategies

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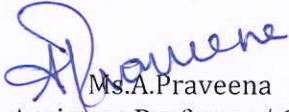
Formulation of real world problems, Breadth First Search, Depth First Search, Depth Limited Search, Iterative Deepening Depth First Search, Bidirectional Search, Comparison of Uninformed search Strategies, Searching with partial information, Sensor-less problems.

Module III: Informed Search Strategies

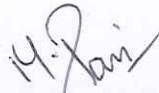
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Introduction to Neural Network - Neural Network: II - Multilayer Perceptron - Multilayer Perceptron: II. Back propagation Learning - Loss Function - Back propagation learning: Example - Back propagation Learning: Example II – Autoencoder - Autoencoder Vs. PCA I.

Course Designed By



Ms. A. Praveena
Assistant Professor / CSE
Jansons Institute of Technology



Ms. M. Pavithra
Assistant Professor / CSE
Jansons Institute of Technology



Dr. E. S. Shamila
Professor, CSE
Jansons Institute of Technology

Approved By



Mr. M. Sharrath
Assistant Professor / CSE

Approved By



Dr. A. Velayudham,
Prof & Head / CSE

Approved By



Principal

Industry Readiness Coordinator

Head of Department

Dr. A. VELAYUDHAM, M.E., Ph.D.,
Professor & Head,
Dept. of Computer Science and Engineering,
Jansons Institute of Technology,
Karumathampatti, Coimbatore - 641 659.

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