



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 DEEP LEARNING 2021 - 2022 ODD SEMESTER

Course Objectives:

- To understand the theoretical foundations, algorithms, methodologies, and applications of neural networks.
- To be able to apply and design to develop an application.
- To provide the practical knowledge handling and analyzing real world applications.

Course Outcomes:

- Have a good understanding of the fundamental issues and basics of deep learning.
- Ability to differentiate the concept of deep learning techniques.
- Design and implement various Deep Learning algorithms in a range of real-world applications.

Syllabus:

Module I: Deep Learning

10

Introduction - Feature Descriptor: I - Feature Descriptor: II - Bayesian Learning: I - Bayesian Learning: II - Discriminant Function: I - Discriminant Function: II - Linear Classifier.

Module II: Support Vector Machine

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Support Vector Machine: I - Support Vector Machine: II - Multiclass Support Vector Machine: I - Multiclass Support Vector Machine: II - Optimization - Optimization Techniques in Machine Learning - Nonlinear Functions.

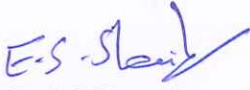
Module III: Neural Network

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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.

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JANSONS INSTITUTE OF TECHNOLOGY
KARUMATHAMPATTI
COIMBATORE - 641 659.

Course Designed By



Dr.E.S.Shamila
Professor / CSE

Jansons Institute of Technology



Mr.P.GowsikRaja
AP / CSE

Jansons Institute of Technology



Mrs.A.Praveena
AP/CSE

Jansons Institute of Technology

Approved By



Mr.M.Sharrath
Assistant Professor / CSE

Industry Readiness Coordinator

Approved By



Dr A Velayudham,
Prof & Head /CSE

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.

Approved By



Principal

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