



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

Recurrent Neural Network

2022- 2023 ODD Semester

Learning Objectives

- The basics of machine learning and neurons (just a review to get you warmed up!)
- Neural networks for classification and regression (just a review to get you warmed up!)
- How to model sequence data
- How to model time series data
- How to model text data for NLP (including preprocessing steps for text)
- How to build an RNN using Tensorflow 2

Learning Outcomes

- Natural language processing with deep learning is a powerful combination.
- Using word vector representations and embedding layers, train recurrent neural networks with outstanding performance across a wide variety of applications, including sentiment analysis, named entity recognition and neural machine translation.

MODULE 1

Introduction to Recurrent Neural Networks

Introduction to Machine Learning - Machine Learning vs Data mining – Types of Learning - Recurrent Neural Network Model – Different Types of RNNs

MODULE 2

Supervised vs Unsupervised Learning

Supervised - Unsupervised Learning - Supervised vs Unsupervised Learning – Real life applications of Supervised and Unsupervised Learning - Classification

MODULE 3

Machine Learning and Data Mining Techniques




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CRISP - DM – applications – Regression- Simple Linear Regression - Multiple Regression - Assessing Performance – Ridge Regression – The working of an RNN - Different RNN architectures and variants - RNN applications

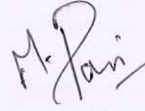
Course Designed By



Dr A Velayudham

Professor / CSE

Jansons Institute of Technology

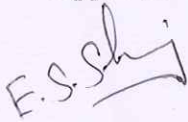


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