

**Vivekanand Education Society’s Institute Of Technology.**

**Department of Information Technology**

| **Course Name :** | Data Science Lab |
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| **Course Code :** | ITL 701 |
| **Sem :** | VII |
| **Class :** | D20A |
| **Academic Year :** | 2023-2024 |

| **Sr. No** | **List of Practical Experiment/Assignment** | **DOP** | **DOS** | **Marks out of 10** | **Sign** |
| --- | --- | --- | --- | --- | --- |
| 1 | To Implement Inferencing  with Bayesian Network in python. |  |  |  |  |
| 2 | To build a Cognitive text based application to understand context for a Customer service application/ Insurance/ Healthcare Application/ Smarter Cities/ Government etc. |  |  |  |  |
| 3 | To build a Cognitive based application to acquire knowledge through images for a Customer service application/ Insurance/ Healthcare Application/ Smarter Cities/ Government etc. |  |  |  |  |
| 4 | To implement Fuzzy Membership Functions. |  |  |  |  |
| 5 | To implement Fuzzy set Properties. |  |  |  |  |
| 6 | To design a Fuzzy control system using Fuzzy tool/library. |  |  |  |  |
| 7 | To implement CNN Deep Learning Applications like   i) Image Classification System  ii) Handwritten Digit Recognition System (like MNIST Dataset)  iii) Traffic Signs Recognition |  |  |  |  |
| 8 | To implement supervised learning algorithm like  i)   Ada-Boosting  ii)  Random forests |  |  |  |  |
| 9 | Analysis and comparison of different Machine learning and Deep learning algorithms. |  |  |  |  |
| 1 | Assignment1 |  |  |  |  |
| 2 | Assignment 2 |  |  |  |  |
| **Mini Project** | | **Marks out of 10** | | | |
| 10 | Mini-Project – To build text/ image/ video/ audio based Data Science/AI based Application. |  |  |  |  |

Subject Teacher