**G.H. Patel of College of Engineering and**



**Technology Department of Computer Engineering**

# 

# Vision

To produce globally competitive computer engineers, who are prepared to accept the challenges at professional level, while maintaining the core values.

# Mission

* To create excellent teaching learning environment.
* To mould engineers with a strong foundation of scientific knowledge and engineering concepts.
* To enhance the acquired concepts and develop new technology through excellence in research.
* To assist nation building and elevating the quality of life of the people through leadership in professionalism, education, research and public services.

# Programme Educational Objectives (PEO)

* To educate young aspirants with the fundamentals of engineering and knowledge of latest technologies.
* To encourage the students to remain updated by pursuing higher degree or certification programs.
* To assume management and leadership roles to contribute in socio-economic development of the nation.

**G.H. Patel of College of Engineering and**



**Technology Department of Computer Engineering**

**A.Y. 2024-25(EVEN),SEMESTER VI**

**SUBJECT CODE: 202046702**

**SUBJECT NAME: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**

**INDEX**

**NAME:**

**ENROLLMENT : BRANCH:**

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| --- | --- | --- | --- | --- | --- |
| **Sr. No** | **Name of the Experiment** | **Page**  **No.** | **Date** | **Marks** | **Sign** |
| 1. | Implement Breadth first search or Depth first search. |  |  |  |  |
| 2. | Implement solution of Water Jug problem or 8-puzzle problem using Best First Search or A\*. |  |  |  |  |
| 3. | Write a program to solve a given cryptarithmetic problem. |  |  |  |  |
| 4. | Write a program to perform following operation   * Load the data from file * Find out null and missing value * Handle missing Value using different approach   Plot the data using scatter plot, histogram, box plot |  |  |  |  |
| 5. | Write a program to implement Linear Regression. |  |  |  |  |
| 6. | Write a program to implement k-Nearest Neighbor algorithm to classify the iris data set. Print both correct and wrong predictions. |  |  |  |  |
| 7. | Write a program to demonstrate the working of the decision tree based ID3 algorithm. Use an appropriate data set for building the decision tree and apply this knowledge to classify a new sample.e. |  |  |  |  |
| 8. | Write a program to classify IRIS data using Random Forest classifier. |  |  |  |  |
| 9 | Write a program to classify iris dataset using SVM. Experiment with different kernel functions. |  |  |  |  |
| 10. | Build an Artificial Neural Network by implementing the Backpropagation algorithm and test the same using appropriate data sets. |  |  |  |  |
| 11. | Write a Program to implement K-Means clustering Algorithm. |  |  |  |  |
| 12. | Case study/Project: Implementation of any real time application using suitable machine learning technique. |  |  |  |  |

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| --- | --- | --- | --- | --- | --- |
| Sr.  No | List of Assignment(s) | Page  No. | Date | Marks | Signature |
| 1 | Assignment I |  |  |  |  |
| 2 | Assignment II |  |  |  |  |
| 3 | Assignment III |  |  |  |  |
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