

# Classification of Online News Articles using Optimised Machine Learning Models

## PROBLEM STATEMENT

To develop and implement an efficient machine learning system for classifying online news articles into relevant categories, utilizing optimization techniques to enhance accuracy and to give personalized user experience

## MOTIVATION

Classifying online news using machine learning provides several benefits, such as enabling efficient content categorization, automating information retrieval, and enhancing personalized recommendations. It helps users quickly find relevant news, improves the overall user experience, and allows platforms to better target audiences for advertising.

## INTRODUCTION TO TOPIC

In today's digital age, the vast amount of online news content available presents a challenge in efficiently organizing and accessing relevant information. Users often find themselves overwhelmed by the sheer volume of articles across various topics, making it difficult to identify content that aligns with their interests and preferences. In response to this challenge, the application of machine learning techniques for the classification of online news articles has emerged as a promising solution

## INTRODUCTION FOR DOMAIN

Machine learning is a transformative field of artificial intelligence that empowers computers to learn from data and make predictions or decisions without being explicitly programmed to do so.

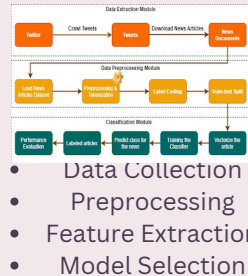
• There are three main types of machine learning approaches

- 1) Supervised Learning
- 2) Unsupervised Learning
- 3) Reinforcement Learning

## DATASETS

1. AG News Dataset
2. Reuters-21578 Text Categorization Dataset
3. 20 Newsgroups Dataset
4. New York Times Annotated Corpus

## METHODOLOGY



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