

# RajalakshmiEngineeringCollege

## DepartmentofArtificialIntelligence&MachineLearning

IIYear(2025–2026)-AI23521:BuildandDeploymentofMLapp Mini

### Project - Abstract

Title	Customer Text Emotion Prediction using Machine Learning	
Team Members	Reg.No. 231501127 231501164 231501166	Name Raj Kumar E Supraja R Surya MV
Project Mentor	Dr.M.Soundarya AIML Dept	

### Text Emotion Prediction using Machine Learning

#### ABSTRACT:

This project aims to predict the emotions conveyed in user-provided text using machine learning techniques. By applying natural language processing methods and emotion classification models, the system identifies the emotional tone behind sentences or texts input by users. Various classification algorithms such as Support Vector Machines, Random Forests, and deep learning approaches like LSTM or transformer-based models are considered to achieve accurate emotion detection. The project processes text data through feature extraction techniques including word embeddings and sentiment lexicons, enabling effective representation of semantic and emotional features. This system simulates real-world applications in customer service, mental health monitoring, and social media analytics by providing insightful emotion analysis. The integrated pipeline balances predictive accuracy and interpretability, facilitating personalized responses and better user engagement. The study is carried out using a large annotated dataset for training and testing, with a focus on multi-class emotion classification, and aims to contribute to advancements in affective computing and human-computer interaction.

SUPERVISOR

REVIEWER