

## Configuration

### Instructions:

1. Enter your model's  
`/invocations`  
endpoint URL.
2. Fill out the topic,  
question, repo url, and  
folder path.
3. Click **Run Analysis** to  
receive an AI-generated  
answer.

### Example URL:

`https://localhost:5000/i`  
`nvocations`

MLflow Model Endpoint URL


`https://localhost:52774/`



# Agentic Github Repo Analyzer

 Topic

Classification Algorithms

 Question

Which machine learning classification algorithms are used  
in this project?

Enter GitHub Repo URL

`https://github.com/HPInc/AI-Blueprints`


Enter Folder Name in Repo

`data-science/classification-with-svm`

 Run Analysis



## Final Answer

#  Synthesized partial answer (1/1)

# Machine Learning Classification Algorithms

The machine learning classification algorithms

1. **Train/Test Split:** This is a technique used to evaluate the performance of a machine learning model. It involves splitting the dataset into two parts: a training set and a test set.
2. **StandardScaler:** This is a feature scaling algorithm used to scale the features of a dataset to have a mean of 0 and a standard deviation of 1. This is useful for many machine learning algorithms that assume features are on the same scale.
3. **Logistic Regression (LR):** This is a linear model used for classification problems. It is based on the logistic function, which maps any real-valued number to a value between 0 and 1.
4. **Linear Discriminant Analysis (LDA):** This is a linear model used for classification problems. It is based on the idea of finding a linear combination of the features that maximizes the separation between the classes.
5. **K-Nearest Neighbors (KNN):** This is a non-parametric model used for classification problems. It is based on the idea of finding the K nearest neighbors to a new data point and using their labels to make a prediction.
6. **Classification and Regression Trees (CART):** This is a non-parametric model used for classification and regression

problems. It is based on the idea of recursively partitioning the data into smaller subsets based on the values of the features.

7. **Gaussian Naive Bayes (NB):** This is a probabilistic model used for classification problems. It is based on the idea of assuming that the features are independent and identically distributed, and that the probability distribution of each feature is a Gaussian distribution.
8. **Support Vector Machines (SVM):** This is a linear model used for classification problems. It is based on the idea of finding the hyperplane that maximally separates the classes in the feature space.

#### Full Message Trace

```
[
  0 : {
    "role" : "developer"
    "content" : "User submitted a question."
  }
  1 : {
    "role" : "user"
    "content" :
      "Which machine learning classification
      algorithms are used in this project?"
  }
  2 : {
    "role" : "developer"
    "content" : "🟡 Relevance check result:"
  }
  3 : {
    "role" : "assistant"
    "content" : "yes"
  }
]
```

```
}
```

```
▼ 4 : {
```

```
  "role" : "developer"
```

```
  "content" :
```

```
    "💾 Retrieved cached answer for question:  
    'Which machine learning classification  
    algorithms are used in this project?'"
```

```
}
```

```
▼ 5 : {
```

```
  "role" : "developer"
```

"content" :

"🤖 Final answer delivered: # 🟡  
Synthesized partial answer (1/1)

## # Machine Learning Classification Algorithms

The machine learning classification algorithms mentioned or utilized in the project documentation are:

1. **\*\*Train/Test Split\*\***: This is a technique used to evaluate the performance of a machine learning model. It involves splitting the dataset into two parts: a training set and a test set.

2. **\*\*StandardScaler\*\***: This is a feature scaling algorithm used to scale the features of a dataset to have a mean of 0 and a standard deviation of 1. This is useful for many machine learning algorithms that assume features are on the same scale.

3. **\*\*Logistic Regression (LR)\*\***: This is a linear model used for classification problems. It is based on the logistic function, which maps any real-valued number to a value between 0 and 1.

4. **\*\*Linear Discriminant Analysis (LDA)\*\***: This is a linear model used for classification problems. It is based on the idea of finding a linear combination of the features that maximizes the separation between the classes.

5. **\*\*K-Nearest Neighbors (KNN)\*\***: This is a non-parametric model used for classification problems. It is based on the idea of finding the K nearest neighbors to a new data point and using their labels to make a prediction.

6. **\*\*Classification and Regression Trees**

(CART)\*\*: This is a non-parametric model used for classification and regression problems. It is based on the idea of recursively partitioning the data into smaller subsets based on the values of the features.

7. \*\*Gaussian Naive Bayes (NB)\*\*: This is a probabilistic model used for classification problems. It is based on the idea of assuming that the features are independent and identically distributed, and that the probability distribution of each feature is a Gaussian distribution.

8. \*\*Support Vector Machines (SVM)\*\*: This is a linear model used for classification problems. It is based on the idea of finding the hyperplane that maximally separates the classes in the feature space."

}

]