**Source Code for the below mentioned algorithm** [**https://github.com/srikanthagowda/Resume/**](https://github.com/srikanthagowda/Resume/)

**Regression Algorithms**

**Simple Linear Regression**

1 Built a Simple Linear Regression model to predict the salary of an employee based on the years of experience (Dataset=salary\_Data.csv)

2 Built a Simple Linear Regression model to predict the Home Price in USA based on area (dataset=homeprece.csv)

3 Built a simple Linear Regression model to predict the per capita income of Canada City (Dataset= Canada\_per\_capita\_income.csv)

**Multi Linear Regression**

1 Built a Multi Linear Regression Model to predict the profit for the company(Dataset = 50\_startups)

2 Built a Multi Linear Regression Model to predict the home price based on area,no\_of\_bedrooms,age

3 Built a Multi Linear Regression Model to predict the salary of an employee based on experience, test\_score and interview score

**Built a model to predict salary of an employee based on position using Linear Regression , Polynomial Regression , Support vector Regression , Decision Tree Regression and Random Forest**

**Comparison of Regression Algorithm with Same Dataset** 'Position\_Salaries.csv'

|  |  |  |
| --- | --- | --- |
| **Sl No** | **Regression Name** | **Accuracy** |
| **1** | Linear Regression | 66.90412331929895 |
| **2** | Polynomial Regression | 99.73922891706614 |
| **3** | Support Vector Regression | 75.16001070620798 |
| **4** | Decision Forest Regression | 100.0 |
| **5** | Random Forest Regression | 97.04434230386582 |

**Classification Algorithms**

**Logistic Regression (Binary Class Regression)**

1 Built a Logistic Regression model to predict if a person would buy life insurance on his age.

2 Built a Logistic Regression model to predict the employee retain ratio helpful for HR management.

**Logistic Regression (Multi Class Regression)**

1 Built a Logistic Regression model to predict the person bought the product or not in Mall.

2 Built a Logistic Regression for Digit Classifier/Recognizer

**Support Vector Machine**

1 Built a SVM model for IRIS data classification.

**Decision Tree Classifier**

1 Built a model to classify the salaries (>100k) of an employee based on the company, job, and degree (Dataset: Salaries.csv)

2 Built a decision tree model to predict if person is survived or not in titanic dataset.

**Random Forest Classifier**

**1** Built a model to predict the person bought the product or not in Mall.

**KNN Classifier**

1 Built a model to predict the person bought the product or not in Mall.

**Clustering Algorithms**

**1 K Means Algorithm**

Built a Clustering Model to cluster the Employee based on Age and Income

**2 Naïve Bayes Algorithm**

Spam Detection

**Deep Learning Algorithm (Using Tensor Flow and Keras Libraries)**

1 Image Detection in FMNIST Dataset

2 Digit Identifier in MNIST dataset