

Decision Tree Regression

Importing the dataset

```
dataset = read.csv('Salary.csv')
```

```
dataset = dataset[2:3]
```

Splitting the dataset into the Training set and Test set

```
library(caTools)
```

```
set.seed(123)
```

```
split = sample.split(dataset$Salary, SplitRatio = 2/3)
```

```
training_set = subset(dataset, split == TRUE)
```

```
test_set = subset(dataset, split == FALSE)
```

Feature Scaling

```
training_set = scale(training_set)
```

```
test_set = scale(test_set)
```

Fitting Decision Tree Regression to the dataset

```
library(rpart)
```

```
regressor = rpart(formula = Salary ~ ., data = dataset, control = rpart.control(minsplit = 1))
```

Predicting a new result with Decision Tree Regression

```
y_pred = predict(regressor, data.frame(Level = 6.5))
```

Visualising the Decision Tree Regression results (higher resolution)

```
library(ggplot2)
```

```
x_grid = seq(min(dataset$Level), max(dataset$Level), 0.01)
```

```
ggplot() + geom_point(aes(x = dataset$Level, y = dataset$Salary), colour = 'red')
```

```
+ geom_line(aes(x = x_grid, y = predict(regressor, newdata = data.frame(Level = x_grid))), colour = 'blue')
```

```
+ ggtitle('Truth or Bluff (Decision Tree Regression)') + xlab('Level') + ylab('Salary')
```

Plotting the tree

```
plot(regressor)
```

```
text(regressor)
```