

## **K Nearest Neighbors for clicked on Advertisement**

In this project the company need to know whether or not a particular internet user clicked on an Advertisement on a company website. I created a model based on KNN algorithm that predict whether or not they will click on an ad based off the features of that user.

### **This data set contains the following features:**

- 'Daily Time Spent on Site': consumer time on site in minutes
- 'Age': customer age in years
- 'Area Income': Avg. Income of geographical area of consumer
- 'Daily Internet Usage': Avg. minutes a day consumer is on the internet
- 'Ad Topic Line': Headline of the advertisement
- 'City': City of consumer
- 'Male': Whether or not consumer was male
- 'Country': Country of consumer
- 'Timestamp': Time at which consumer clicked on Ad or closed window
- 'Clicked on Ad': 0 or 1 indicated clicking on Ad

### **The methodology used in this project is as follow.**

- ✓ Exploratory data analysis using 'sns.distplot' and 'sns.pairplot'
- ✓ Standardized the variable
- ✓ Split the data to train and test
- ✓ Fit the KNN model to the training data
- ✓ Using the developed model to predict the test data
- ✓ Evaluate the model using confusion matrix
- ✓ Select the optimum value of K
- ✓ Repeat the KNN model with the optimum K value