**RoadMap to learn Data Science**

**Data Science:**

Data Science is a multi-disciplinary subject encompasses the use of Mathematics, Staticstics, and Computer Science to study and evaluate data. The key objective of Data Science is to extract valuable information for use in strategic decision making, product development, trend analysis and forecasting.

Below are the steps for learning Data Science:

STEP-1: MATHEMATICS

* Calculus, Linear Algebra, Probability, Statistics etc.

STEP-2: PROGRAMMING LANGUAGES

* PYTHON or R and MySQL Software used for Database Management System.

STEP-3: DATA WRANLING AND MUNGING

* Pandas is a Python library used for data wrangling and data munging.

STEP-4: DATA ANALYSIS AND VISUALIZATION

* NumPy and SciPy Python libraries are used for data analysis.
* Matplotlib Python library is used for data visualization.

STEP-5: MACHINE LEARNING

* Python libraries used for Machine Learning are NumPy, SciPy, Tensor flow, Pandas, Matplotlib, Scikit etc.

**EYE PHONE**

Eye phone is a hands-free interfacing system that is used for activating mobile phone by eye.

The functions of the phone can be drive easily. The phone functions activated by blinking of the eye. The navigation key functions are done by the movement of eye.

The principle behind in eye phone technology is Eye tracking systems. There is no need for any other devices that placed in the eye for tracking the movements It is done by the movement of pupil in the eye. The device senses the movement of the eye using the pupil movement. Normal devices are used front camera to sense the eye movement. But in modern phones uses sensors used to track eye movements.

Eyephone tracks the user’s eye movement across the phone’s display using the camera mounted on the front of the phone; more specifically, machine learning algorithms are used to:

* Track the eye and infer its position on the mobile phone display as a user views a particular application.
* Detect eye blinks that emulate mouse clicks to activate the target application under view. We present a prototype implementation of Eyephone on a Nokia N810, which is capable of tracking the position of the eye on the display, mapping these positions to an application that is activated by a wink. At no time does the user have to physically touch the phone display.