# Statistical Analysis for Twitter Spam Detection Vision Document

### Introduction

Spam Detection System is a system that will avoid the unwanted and irrelevant posts on twitter feed of a particular user. This system will provide a backend processing of the feed data and classification of the same data and providing with the only needed information. This system will also provide additional performance measures using statistical computations.

# Requirement

Spam posts on the social platform Twitter has caused a lot of irritation to the daily users of the platform. There aren't any particular areas for spam posts so there are to be some systems in place to check for so. In order to achieve the target of identification and classification of the all the tweets as spam and non-spam, and improve the ecstatic of the platform by eliminating such tweets, a research was done recently using surveys with users complaining about the excess amount of spam tweets. Through the statistics of the typical factors and analysis the type of tweets was done using statistical measures.

It is of very importance that the twitter feed of a user shall not have irrelevant posts/tweets. This will save the time of the user and provide him with only the needed information. Further, it will also eliminate the threats of spam tweets and provide a much better user experience.

## **Project Overview**

Spam Detection System will be a classification system designed for running as an application that will monitor the twitter feed of a particular user after login and classify the feed tweets as spam and non-spam. Based on the estimation and a few other factors, this system will provide performance measures and display with the filtered content on the main feed.

The system will designed specifically for individuals that have a twitter account. This system focuses on reducing unwanted and irrelevant tweets and provide a much better feed and user experience.

### **Major Features**

 Application: This application will be runned in the background whenever the user logs into the twitter account. It will be responsible for the main functionality of the system of classification of tweets.

- Classification Model: This will the model that will be built by using some training datasets and then applied further on login of the user. This will the responsible for the main categorization of tweets as spam and non-spam.
- Feature Extraction: It will also provide us with the extracted features of the tweets
  and categorised into two types as Account based and Tweet-Content based which
  will consist of features like account\_age, no\_followers, no\_retweets, no\_chars,
  no\_digits etc

## **Scope and Limitations**

Use of this system is in online social networking for spam detection. Features of tweets will be in two categories mentioned above in the major features as Feature Extraction.

It is unable to detect the categorization of tweets on the basis of their types. System won't be able to work on posts/tweets containing images. In other words it will only work on posts having textual data.