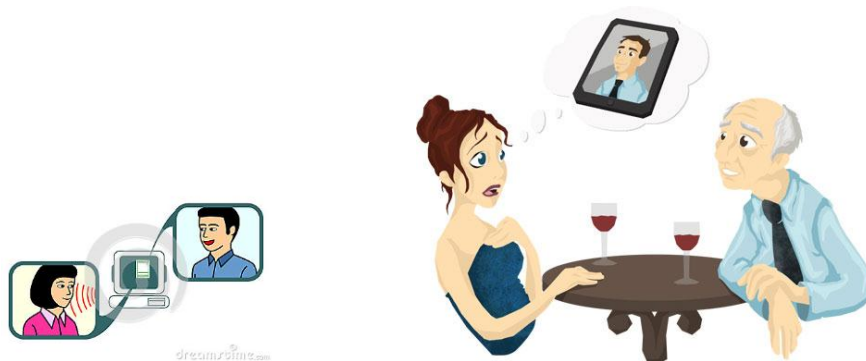# Sri Lanka Institute of Information Technology

Project Topic Assessment – 2017

Research Problem:

Identify characteristics of the chatting partner by analyzing chat messages. Nowadays we meet strangers all the time in our day to day life. So we attempt to have partnership with them without any fear at all. Also some time they are more and more smart than we think, then it's very difficult to identify the characteristics by only looking at their messages, because any one can send anything. Nowadays it is highly required to have intelligent way to detect those frauds (may be what that message really mean).

Also we hear some news that people is attempting to suicide their self because of these kind of fake users on the internet. In this proposed web application we try to address these problems highly.

\# In 2002, 8.7% of Facebook's users were fake, and in 2014, this number increased to 11.2% of users despite the many algorithms improvements and deleted spam accounts.

\# It's also estimated that 8.5% of twitter users are fake, and about 10% of Instagram users are fake accounts. Both Social networks have been vigorously fighting fake users.

As we pointed out the true things about social network, the social web is overwhelmed with spammers and bogus profiles. The only way to deal with this by having some intelligent application connected with social networks

Research Area:

1. Extraction of Emotion from chat messages.
2. Detect the fraud.
   (If the message says something wrong).
3. Analyzing the time.
4. Detect the conversation in analytical way (topic detection).

        Under these main research areas system comprises of more research areas such as short form analysis.
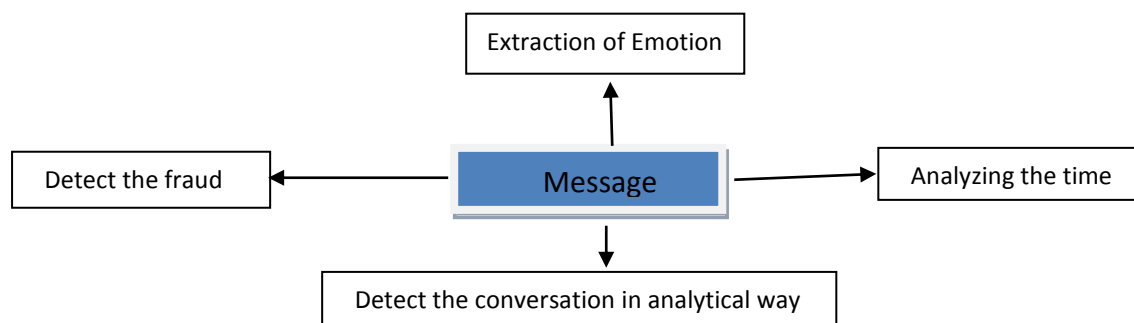
Ex :- Acronym of "ASAP" is equivalent for "As Soon As Possible"

Solution proposed:

        The purpose of this research is to study the characteristics of chat messages from analyzing. It's a web application that analyzes messages in the chat box in short time of period. It simply gives us clear idea about the message by analyzing it in various ways, In that case we can be pretty much aware about our chatting partner. Nowadays it's been increased of meeting strange people in our day to day life. So this application let you deal with that strange people in understandable way. It shows you auto generated notifications (messages) in real time based on messages you receive from your chatting partner.

        Also using this proposed web application we try to detect fake users and their behaviors before other party. And you can be pretty much aware about messages and what they really mean to you.

        This web application comprises of English based chatting analysis and notification methodology receiving in short time (even from milliseconds).

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                    ┌──────────────────────┐
                    │ Extraction of Emotion │
                    └──────────────────────┘
                               ▲
                               │
┌──────────────────┐   ┌──────────────┐   ┌────────────────────┐
│ Detect the fraud  │ ◀ │   Message    │ ▶ │ Analyzing the time │
└──────────────────┘   └──────────────┘   └────────────────────┘
                               │
                               ▼
              ┌──────────────────────────────────────┐
              │ Detect the conversation in analytical way │
              └──────────────────────────────────────┘
```

Technologies to be used:

Machine learning.

Deep reinforcement learning and neural network.

Clustering algorithms.

Data Analytics.

For this   system we will discover lot more technologies based on our future out comes or we will change the technologies as we go through this.

Team Members:

Student Name	ID
E. Dinesh Lakmal	IT14085840

- **For official use only**

Acceptable: YES/NO

Changes proposed:

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_____
_____

Any other Comments:

_____
_____
_____

Approved by CDAP Group:

Member's Name	Signature
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