# **Fake News Detection in Document Text Images**

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**By**

**Waleed Mughal**

**&**

**Rehan Qayyum**

**(BSCS 7TH A)**

**Supervised By:**

**Sir Nouman Qadeer**

**Project Coordinator:**

**Sir Nasir Ayub**

**Project Title and Idea Approval Page**

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| **Student Section**  Project Title: **Fake News Detection in Document Text Images**  **Group Members:**  **(1) Mr.** Rehan Qayyum **(2) Mr.** Waleed Mughal  **Project Supervisor: Mr.** Nauman Qadeer |

**Supervisor Section**

**Supervisor Comments:**

 Proposal Idea is good enough to take it as a Final Project. **Yes**

* Are they doing project for the real client, if yes, **No** students have to provide evidence letter

**Supervisor Comments (if any):** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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 Project Idea is accepted under your Supervision. **Yes**

**Supervisor Signature with Date:** \_\_29-06-2020\_\_\_

**Project (P1) Coordinator Section**

**BSCS - 7thA / B / C (Morning / Evening)**

**P1 Instructor Name:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_



**Project Proposal is approved.**

**Submission Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** **Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Fake News Detection by Image Document**

1. **Introduction:**

Images and video-audio sequences have traditionally been considered a gold standard of truth, as the process of altering or creating fake content was restricted to researchers and skilled users. With the development of tools and editing software that make the forgery process almost automatic and easy, even for nonprofessionals this is no longer true. Not only the process of altering digital content became easier in the last years, but also the process of creating and sharing it. With more than 3 billion of users active on social media, it has been recently estimated that 3.2 billion images are shared every day, and 300 hours of video per minute are uploaded to YouTube.

1. **Problem Statement:**

In case of high-impact events, such as terrorist attacks or natural disasters, the uploaded images and videos are publicly visible and spread quickly, within seconds. The phenomenon, in which ordinary man and women can document events that were once the domain of professional documentary makers, is typically referred to as*citizen journalism*. This changes the way in which journalist and professional figures work. In fact, they no longer need to move to the location of an event but can simply use content uploaded online. The strong competition of news outlets and individual news sources to be the first to publish news jointly with the speed of the news spreading process limits the time that journalists can spend in verifying the veracity and provenance of images and videos. The superficiality or negligence in the verification of the digital content makes the risk of spreading fake information extremely high. Moreover, fake images and videos might be shared with malicious intent to have a higher number of clicks and thus generate a revenue.

1. **Proposed System:**

To overcome the flaws in the correctness of the news which is spread by the images there is a whole new automated system that can detect the validity of the news in the image by using enhanced techniques.[1] To get the image and then applying techniques of image processing to get the text inside the image.[2] To check the validity of the news by using any search engine in the backend.[3]To train the classifier about it using Artificial Intelligence techniques, more the classifier is trained on the dataset the more accurately it gives the results out.[4]To give the output as the answer of the image containing news i.e. showing result of it either true or false.

1. **Benefits of Proposed System:**

The benefits of the system proposed are:

* Anyone can detect the concurrency of the news in the image by using the proposed system.
* No wastage of time on fake content.
* Reduction of chances of spreading fake news.

# **Survey Analysis:**

System

1. **Modules and Sub-Modules:**
   1. **Security Management:**
      1. **Process Signup.**
      2. **Process Login.**
      3. **Forgot Password.**
      4. **Change Password.**
   2. **Image Management:**
      1. **Add Image.**
   3. **Data Management:**
      1. **Process Data.**
      2. **Feature Extraction.**
   4. **Search Management:**
      1. **Search Data.**
   5. **Verification:**
      1. **Verify Data.**
      2. **Result.**
2. **Primary Actors:**

* Administrator.
* User (who wants to detect news concurrency)

1. **Tools and Techniques Used:**
   1. **Front End:**
   2. **Back End:**
2. **Process Model and System Design Approach Used:**

* **RUP (Rational Unified Process Model).**
* **UML (Unified Modern Language).**

1. **Limitation:**

Requires internet connection to perform.

1. **References:**

* Visual and Textual Analysis for Image Trustworthiness Assessment within Online News (<https://doi.org/10.1155/2019/9236910>)
* Schulten K Skills and Strategies| fake news vs real news. The Learning Network 2017.
* A Tool for Fake news detection (<https://www.researchgate.net/publication/334167597_A_Tool_for_Fake_News_Detection>).