

Comparison Analysis and Data Retrieval to identify the associated people of Instagram by Image Processing

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Abstract. Instagram has become a fastest growing social network in the last three years. It let the users to share their status by uploading images with a descriptive text, a location, and certain hashtags that do not necessarily represent the substance of the pictures. So now Instagram has become a most popular photo-sharing website. While it is a relatively simple service, Instagram's simplicity has contributed to its worldwide success. But unfortunately, some people misuse this website for unethical activities such as sharing false propaganda and fake news, terrorist activities, unethical religious activities, illicit drug distributions etc. Especially when concerning about Sri Lanka, day by day these kinds of illegal activities are rising. So, it is very important to develop a system to retrieve the data from Instagram accounts and analyse that data to identify the mostly associated people of a certain account. So, to develop a system to retrieve the data from Instagram accounts and analyse that data to identify the mostly associated people of a certain account, it is necessary to use many technologies such as Data retrieving, Analysing and Face recognition. Therefore, this work is to recognize the suitable technologies that can be used to retrieve and analyse image data from Instagram such as Demographic analysis, Text analysis, Image analysis, Snowball Technology and some of the face recognition technologies used in iPhone photos, face recognition technologies such as Eigenfaces technology, Neural Networks, Graph Matching, Line Edge Mapping for a system to retrieve and analyse image data from Instagram and to identify the most associated people of a certain Instagram user.

Keywords: *Instagram, Social network, Face Recognition, Neural Networks, retrieve and analyse image data, Demographic analysis*