



G42 The Strengths and Weaknesses of Missing Persons Apps for Smartphones: A Forensic Expert's Perspective

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After attending this presentation, attendees will possess a deeper understanding of how social media and smartphone applications could become a valuable investigative tool in the search for missing and wanted persons. Crime investigations can benefit from the vast amount of information available online, such as videos, photos, and text posted by criminals, victims, or witnesses.

This presentation will impact the forensic science community by increasing awareness concerning how missing persons apps work, and by considering improvements that could be introduced to make their use possible in human identification scenarios.

There has been a rapid growth in the creation of applications for smartphones that can assist in the search for missing persons. The goal of this presentation is to evaluate features of some of the apps currently available, focusing on the similarities between them and the functions that are unique to a specific app.

Thirteen apps were downloaded and analyzed: Missing Persons (Astutech, United Kingdom), Missedperson (Vijayanand Infotech Pvt. Ltd.) Missing Person's App (Eventa, Saudi Arabia), Missing People Find (QuarkSystem, India), Missing Persons Ireland (Davis College Mallow, Ireland), Missing People Sweden (Red Dawn, Sweden), Safety Savvy (Texas Center for the Missing, United States), MissU (Ashwin Wadte, India), Lost or Found (TeckMapz, India), Alert Missing (Alert Missing), Missing People Canada (Website integration, Canada), ReUnite (National Library of Medicine at NIH, United States) and Scomparsi (SoftFobia, Italy). The apps were installed, tested, then uninstalled on an Android™ phone in order to analyze one app at a time.

The inclusion criteria were: free to download and no parental supervision required. All applications include a repository section where images and descriptions of the missing person can be uploaded, plus a view of all those reported missing: however, not all apps have search filters. "Reunite" has the most complete search and upload features including, when relevant, the ability to plot the location of disasters. The best quality in reporting features are found in those apps which require registration, such as (Reunite and Missing Persons), whereas others can update possible sightings to the app and provide a Global Positioning System (GPS) location. Some apps can only be used in a specific country, although this cannot really be considered a weakness. Nevertheless, the missing person phenomena can, of course, involve people traveling outside the country of origin. Finally, most apps have connections with social media such as Facebook®, Twitter®, and Google+®, but these merely link to the site through the app, they do not share details of the missing report.

The main focus of all the apps tested was on finding the missing person "alive," whereas the use of the app as an aid to identify a deceased person is not considered. The connection with social media networks could be enhanced in order to contribute to antemortem secondary identifiers data collection and possible human identification of missing and unidentified persons through visual recognition including forensic dental identification.

Missing Persons, Social Media, Dental Identification

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