C16 Pokémon™ GO® Forensic Artifacts: An Exploratory Study

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After attending this presentation, attendees will have obtained the results of research regarding the availability of forensic artifacts maintained by mobile devices specific to the Pokémon™ GO® application.

This presentation will impact the forensic science community by providing potential sources for data relevant to criminal investigations maintained within user data associated with the Pokémon™ GO® mobile device application.

Digital Forensic Examiners (DFEs) are responsible for extracting data from a growing number of different electronic device types and performing analyses on a multitude of different resultant data types. It is up to members of the Digital and Multimedia Evidence (DME) field (DFE's and researchers) to search out and interpret new sources of potentially important data to aid in future investigations. This responsibility includes mining for potentially pertinent data stored within mobile device applications, such as the game Pokémon™ GO®.

Pokémon™ GO® is a location-based augmented reality mobile game released in July 2016. There was enormous controversy upon the release of this game due to potential privacy issues and threats to personal property and personal safety. Even with the concerns, Pokémon™ GO® quickly became one of the most popular mobile device games for both Android™ and Apple® iOS®. Active game players are required to physically visit specified locations in order to refill energy, gather objects necessary for game play, and capture Pokémon™ characters. Global Positioning Satellite (GPS) technology tracks the location and progress of game players to determine their physical proximity to designated Pokéstops (locations for players to collect Pokéballs and other items necessary to continue game play and to capture Pokémon™ characters) and Gyms (locations set by game developers to join together with additional players as teams and battle for virtual control of the designated Gym).

Pokémon™ GO® game play requires users to utilize a Pokémon™ Trainer Club, Google®, or Facebook® account for login identification and to provide permissions for the game to monitor player GPS location. The Pokémon™ GO® application also stores information on game play activities within mobile device memory. This presentation will provide the results of an exploratory study into forensic artifacts left behind on Apple® iOS® and Android™ mobile devices specific to the mobile device game Pokémon™ GO® and explore how these artifacts may be used to aid in criminal investigations.

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Pokemon™, Digital, Forensic Artifacts