

Digital & Multimedia Sciences Section – 2010

B9 Mobile Device (Cell Phone/PDA/GPS) Data Extraction Tool Classification System

Samuel I. Brothers, BBA*, 7501 Boston Boulevard, Room 113, Springfield, VA 22153

After attending this presentation, attendees will be able to categorize any mobile device acquisition tool in a systematic classification system. In addition, an overview of all currently available commercial tools for cell phone data extraction will be discussed.

This presentation will impact the forensic science community by providing a common framework for a digital device data extraction tool classification system for the entire digital forensics community.

Our world today has been saturated with inexpensive digital devices. These digital devices are used to stay in contact with friends, (e.g., phone calls and text messages) and to help find our way (e.g., GPS devices). These digital devices have become ubiquitous in our society.

Criminals use these devices to aid them in committing crimes, including the use of GPS devices for human and narcotics smuggling to the use of cell phone text messaging to coordinate attacks and communicate orders in organized crime. These devices contain a wealth of information and intelligence for investigators of crimes.

The field of digital device forensics is in its infancy at this time. The digital forensics community needs a framework (common baseline of understanding) for the classification and understanding of the plethora of tools released into the commercial marketplace in the last five years. A lot of false advertising has occurred, and many practitioners in this field are yearning for an understanding of how these tools work.

It is also critical that the practitioners understand how these tools will impact their evidence collection process. This presentation will "peel back the curtain" to allow attendees to see what is going on "behind the scenes" of these tools. Also presented is a framework and classification system for these tools to provide a better understanding for digital forensics practitioners.

Digital, Forensics, Classification