

## An invitation. The opportunities of modern mobile forensicse

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### Abstract

The responsibility of criminal investigation today is linked to the analysis of the digital environment, coexisting with the real physical world through our electronic devices and mobile phones. Solving crime is never an easy task. This invitation stands in sharing the development of a system that has run hand in hand with the expansion of smartphones and the mobile network as a whole. The first building block of this system is the Call Detail Record, data registered for all telecommunication exchanges and details between our devices and cell towers. The design of an effective and modern mobile forensics tool has also to take into consideration one fundamental and additional objective: Data Validation. This is obtained by cross-referencing third-party CDR information with other evidence streams and opportunities created by smartphones. The natural evolution of a well-performed mobile and digital investigation is to move forward in processing and combining evidence and knowledge with as many other sources as possible. Today, thanks to artificial intelligence and software development this is possible both quickly and efficiently. All with one tool specifically designed for this purpose: analytically mining mobile communication data stored in phone records and cell site installation and traffic data.

### Biography

CEO of Securcube srl, an Italian digital forensics company specialized in call detail records analytics and cell site real coverage surveys and mapping. Certified with EnCE, CCO-CCPA-CCME, Oxygen, XRY, has been working forensic investigations since 2007. Registered at the Italian Courts as an Expert Witness, consulting for several Prosecutors' offices. His experience includes computer fraud; unauthorized access to

computer systems; credit card cloning; violation of copyright; fraudulent bankruptcy; scams; document falsification; digital identity theft; stalking; murder; suicide; drug trafficking. Active in training Law Enforcement globally in digital investigative techniques, has published articles sharing experiences in criminal investigations and court proceedings.