Forensic Research-2013

OMICS Group Conferences
Accelerating Scientific Discovery

2nd International Conference on
Forensic Research & Technology

October 7-9, 2013 Las Vegas, USA

Media forensics-audio, video and image files: Structure, hash tags, metadata and tamper detection

Doug Carner
Forensic Protection, USA

Abstract

Reliable evidence requires proper handling and factual consistency. A process inclusive of Hash tags, metadata and content analysis. A Hash tag ensures that everyone is working from the same set of data. Data analysis can detect if a file was altered prior to receipt. Metadata provides a cross reference of a file's expected structure, GPS coordinates, time and recording configuration. File tampering can be detected by comparing Hash tag, data, metadata and relevant external data. This session will detail basic tools and methods to differentiate an original from its duplicate or an altered copy. Historical examples and emerging technologies will be included.

Biography

Doug Carner is an audio-video enhancement and authentication expert. He is the president and lead technologist of Forensic Protection, and is board certified by the American College of Forensic Examiners and the American Society for Industrial Security. He is a Phi-Beta-Kappa graduate of U.C. Davis, trained in media forensic sciences, and factory trained on leading recording systems. He is an active member of the International Association for Identification, and the International Association for Legal Research Investigators. Mr. Carner has processed evidence in over a thousand cases with results that have been featured in the national news, and accepted by courts and agencies worldwide. His recent high-profile cases include "George Zimmerman – Trayvon Martin", "Mathew Clark", "Abdul Arian", and previously unsolved crimes around the world. Mr. Carner has been featured on "KFI radio news", "PI's Declassified", and as an expert on the "Dr. Phil" show. His writings have been published in "The Jury Expert - American Society of Trial Consultants", "Homeland Security News Wire" and "Security Info Watch". He has pioneered industry innovations and is an avid advocate for Clarification, the new science-based alternative to judgment-based enhancements. Mr. Carner routinely donates his time to innocence projects, indigent clients, and as an educational speaker. He is a frequent lecturer on how to determine if audio-video discovery files are altered copies, how audio-video files are enhanced and authenticated, and effective methods to get opposing counsel's media exhibits and experts excluded. Mr. Carner has received both prosecution and defense praise for his detailed work that results in an exceptionally high rate of pretrial case dismissal or settlement.