The usefulness of models in digital forensics

Digital forensics is a field of academic study unlike most. Initial contributions to the science of digital forensics grew from the bottom up, and until very recently, digital forensics problems were solved by practitioners finding the best way to recover evidence from the computer that they were examining. Around 2001, a concerted effort began to develop an overarching theory and science for digital forensics, and universities around the country jumped on the bandwagon. When Mississippi State University got involved in 2002, there were less than 10 schools in the country doing serious work in digital forensics. Today, there are hundreds. Because of an explosion in the size of digital media and the rapid expansion of the use of smartphones and other digital technologies, the problem of examining those technologies and investigating the crimes committed with, against, or with the support of those technologies has grown exponentially. This talk will present an argument for the use of progressive models developed by digital forensics researchers to understand evidence associated with cyber-crime, devices used in the commission of cyber-crimes, and to get a handle on dealing with a rapidly expanding volume of evidence associated with these crimes.

Biography

Dave Dampier currently serves as Professor of Computer Science & Engineering at Mississippi State University and Director of both the Center for Computer Security Research and the National Forensics Training Center. Prior to joining MSU in 2000, Dr. Dampier spent 20 years active duty as an Army Ordnance and Acquisition Corps Officer. He has a B.S. Degree in Mathematics from the University of Texas at El Paso, and M.S. and Ph.D. degrees in Computer Science from the Naval Postgraduate School. His research interests are in Digital Forensics, Computer Security, and Engineering Education.

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