Preface

Digital forensics deals with the acquisition, preservation, examination, analysis and presentation of electronic evidence. Networked computing, wireless communications and portable electronic devices have expanded the role of digital forensics beyond traditional computer crime investigations. Practically every type of crime now involves some aspect of digital evidence; digital forensics provides the techniques and tools to articulate this evidence in legal proceedings. Digital forensics also has myriad intelligence applications; furthermore, it has a vital role in information assurance – investigations of security breaches yield valuable information that can be used to design more secure and resilient systems.

This book, Advances in Digital Forensics XIII, is the thirteenth volume in the annual series produced by the IFIP Working Group 11.9 on Digital Forensics, an international community of scientists, engineers and practitioners dedicated to advancing the state of the art of research and practice in digital forensics. The book presents original research results and innovative applications in digital forensics. Also, it highlights some of the major technical and legal issues related to digital evidence and electronic crime investigations.

This volume contains sixteen revised and edited chapters based on papers presented at the Thirteenth IFIP WG 11.9 International Conference on Digital Forensics, held in Orlando, Florida on January 30 to February 1, 2017. The papers were refereed by members of IFIP Working Group 11.9 and other internationally-recognized experts in digital forensics. The post-conference manuscripts submitted by the authors were rewritten to accommodate the suggestions provided by the conference attendees. They were subsequently revised by the editors to produce the final chapters published in this volume.

The chapters are organized into seven sections: Themes and Issues, Mobile and Embedded Device Forensics, Network and Cloud Forensics, Threat Detection and Mitigation, Malware Forensics, Image Forensics and Forensic Techniques. The coverage of topics highlights the richness
and vitality of the discipline, and offers promising avenues for future research in digital forensics.

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