Forensics Of Image Tampering Based On The Consistency Of

This book presents essential principles, technical information, and expert insights on multimedia security technology. Illustrating the need for improved content security as the Internet and digital multimedia applications rapidly evolve, it presents a wealth of everyday protection application examples in fields including . Giving readers an in-depth introduction to different aspects of information security mechanisms and methods, it also serves as an instructional tool on the fundamental theoretical framework required for the development of advanced techniques.

This volume constitutes the proceedings of the 19th International Workshop on Digital Forensics and Watermarking, IWDW 2020, held in Melbourne, VIC, Australia, in November 2020. The 20 full papers in this volume were carefully reviewed and selected from 43 submissions. They cover topics such as: novel research, development and application of digital watermarking and forensics techniques for multimedia security.

CONTENTS by CHAPTER: 1. TRACE EVIDENCE, 62 slides 2. LATENT EVIDENCE, 73 slides 3. PATENT EVIDENCE, 67 slides 4. BLOOD SPLATTER ANALYSIS, 24 slides 5. HUMAN REMAINS RECOVERY, 34 slides 6. FORENSIC ENTOMOLOGY, 33 slides 7. CRIME SCENE PHOTOGRAPHY, 127 slides 8. GRID PHOTOGRAPHY, 37 slides 9. ALTERNATE LIGHT SOURCE AND OBLIQUE LIGHTING, 61 slides 10. POST BLAST SCENE PROCESSING, 59 slides 11. HAZARD IDENTIFICATION, 103 slides 12. POST BLAST INVESTIGATION, 59 slides 13. REMAINS PROCESSING, 125 slides ++++ PLUS MORE ++++

AI and Cloud Computing, Volume 120 in the Advances in Computers series, highlights new advances in the field, with this updated volume presenting interesting chapters on topics including A Deep-forest based Approach for Detecting Fraudulent Online Transaction, Design of Cyber-Physical-Social Systems with Forensic-awareness Based on Deep Learning, Review on Privacy-preserving Data Comparison Protocols in Cloud Computing, Fingerprint Liveness Detection Using an Improved CNN with the Spatial Pyramid Pooling Structure, Protecting Personal Sensitive Data Security in the Cloud with Blockchain, and more. Provides the authority and expertise of leading contributors from an international board of authors Presents the latest release in the Advances in Computers series Includes the latest information on AI and Cloud Computing

Second International Conference on Networks and Advances in Computational Technologies

22nd International Conference, Malaga, Spain, July 4–7, 2022, Proceedings, Part II

A Case Study of the Science in Nigeria

Digital Watermarking

Handbook of Digital Forensics of Multimedia Data and Devices, Enhanced E-Book

Computing in Engineering and Technology

Breakthroughs in Research and Practice

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 crime now involves some aspect of digital evidence; digital forensics provides the techniques and tools to articulate this evidence. 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 systems. Advances in Digital Forensics describes original research results and innovative applications in the emerging discipline of digital forensics. In addition, it highlights some of the major technical and legal issues related to digital evidence and electronic crime investigations. The areas of coverage include: Themes and Issues in Digital Forensics Investigative Techniques Network Forensics Portable Electronic Device Forensics Linux and File System Forensics Applications and Techniques This book is the first volume of a new series produced by the International Federation for Information Processing (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 contains a selection of twenty-five edited papers from the First Annual IFIP WG 11.9 Conference on Digital Forensics, held at the National Center for Forensic Science, Orlando, Florida, USA in February 2005. Advances in Digital Forensics is an important resource for researchers, faculty members and graduate students, as well as for practitioners and individuals engaged in research and development efforts for the law enforcement and intelligence communities. Mark Pollitt is President of Digital Evidence Professional Services, Inc., Ellicott City, Maryland, USA. Mr. Pollitt, who is retired from the Federal Bureau of Investigation (FBI), served as the Chief of the FBI's Computer Analysis Response Team, and Director of the Regional Computer Forensic Laboratory National Program. Sujeet Shenoi is the F.P. Walter Professor of Computer Science and a principal with the Center for Information Security at the University of Tulsa, Tulsa, Oklahoma, USA. For more information about the 300 other books in the IFIP series, please visit www.springeronline.com. For more information about IFIP, please visit www.ifip.org.

This book is open access. Media forensics has never been more relevant to societal life. Not only media content represents an ever-increasing share of the data traveling on the net and the preferred communications means for most users, it has also become integral part of most innovative applications in the digital information ecosystem that serves various sectors of society, from the entertainment, to journalism, to politics. Undoubtedly, the advances in deep learning and computational imaging contributed significantly to this outcome. The underlying technologies that drive this trend, however, also pose a profound challenge in establishing trust in what we see, hear, and read, and make media content the preferred target of malicious attacks. In this new threat landscape powered by innovative imaging technologies and sophisticated tools, based on autoencoders and generative adversarial networks, this book fills an important gap. It presents a comprehensive review of state-of-the-art forensics capabilities that relate to media attribution, integrity and authenticity verification, and counter forensics. Its content is developed to provide practitioners, researchers, photo and video enthusiasts, and students a holistic view of the field.

This conference proceeding is a collection of the papers accepted by the CENet2021 – the 11th International Conference on Computer Engineering and Networks held on October 21-25, 2021 in Hechi, China. The topics focus but are not limited to Internet of Things and Smart Systems, Artificial Intelligence and Applications, Communication System Detection, Analysis and Application, and Medical Engineering and Information Systems. Each part can be used as an excellent reference by industry practitioners, university faculties, research fellows and undergraduates as well as graduate students who need to build a knowledge base of the most current advances and state-of-practice in the topics covered by this conference proceedings. This will enable them to produce, maintain, and manage systems with high levels of

trustworthiness and complexity.

This book constitutes the thoroughly refereed post-conference proceedings of the 9th Interntaional Workshop on Digital Watermarking, IWDW 2010, held in Seoul, Korea, in October 2010. The 26 revised full papers presented were carefully reviewed and selected from 48 submissions. The papers are organized in topical sections on forensics, visual cryptography, robust watermarking, steganography, fingerprinting, and steganalysis.

From DeepFakes to Morphing Attacks

12th International Conference, IH 2010, Calgary, AB, Canada, June 28-30, 2010, Revised Selected Papers

10th Chinese Conference, IGTA 2015, Beijing, China, June 19-20, 2015, Proceedings

Computational Science and Its Applications – ICCSA 2022

19th International Workshop, IWDW 2020, Melbourne, VIC, Australia, November 25–27, 2020, Revised Selected Papers

Advances in Digital Forensics

Multimedia Forensics

Digital Image ForensicsThere is More to a Picture than Meets the EyeSpringer Science & Business Media

This book constitutes the refereed proceedings of the 11th International Conference on Digital Forensics and Cyber Crime, ICDF2C 2020, held in Boston, MA, in October 2020. Due to COVID-19 pandemic the conference was held virtually. The 11 reviewed full papers and 4 short papers were selected from 35 submissions and are grouped in topical sections on digital forensics; cyber-physical system Forensics; event reconstruction in digital forensics; emerging topics in forensics; cybersecurity and digital forensics.

This 2 volume-set of IFIP AICT 583 and 584 constitutes the refereed proceedings of the 16th IFIP WG 12.5 International Conference on Artificial Intelligence Applications and Innovations, AIAI 2020, held in Neos Marmaras, Greece, in June 2020.* The 70 full papers and 5 short papers presented were carefully reviewed and selected from 149 submissions. They cover a broad range of topics related to technical, legal, and ethical aspects of artificial intelligence systems and their applications and are organized in the following sections: Part I: classification; clustering - unsupervised learning -analytics; image processing; learning algorithms; neural network modeling; object tracking - object detection systems; ontologies - AI; and sentiment analysis - recommender systems. Part II: AI ethics - law; AI constraints; deep learning - LSTM; fuzzy algebra - fuzzy systems; machine learning; medical - health systems; and natural language. *The conference was held virtually due to the COVID-19 pandemic.

This book constitutes the refereed proceedings of the 8th Interntaional Workshop, IWDW 2009,

held in Guildford, Surrey, UK, August 24-26, 2009. The 25 revised full papers, including 4 poster presentations, presented together with 3 invited papers were carefully reviewed and selected from 50 submissions. The papers are organized in topical sections on robust watermarking, video watermarking, steganography and steganalysis, multimedia watermarking and security protocols, as well as image forensics and authentication.
Theory and Implementation
10th International Conference, ICISS 2014, Hyderabad, India, December 16-20, 2014. Proceedings
Advances in Image and Graphics Technologies
Encyclopedia of Information Science and Technology, Third Edition
Image Tampering Detection for Forensics Applications
Innovations in Computational Intelligence and Computer Vision
EAI International Conference on Big Data Innovation for Sustainable Cognitive Computing

The book is a collection of selected high quality research papers presented at the International Conference on Computing in Engineering and Technology (ICCET 2019), held on January 10–11, 2019 at Deogiri Institute of Engineering and Management Studies, Aurangabad, India. Focusing on frontier topics and next-generation technologies, it presents original and innovative research from academics, scientists, students, and engineers alike.

The eight-volume set LNCS 13375 – 13382 constitutes the proceedings of the 22nd International Conference on Computational Science and Its Applications, ICCSA 2022, which was held in Malaga, Spain during July 4 – 7, 2022. The first two volumes contain the proceedings from ICCSA 2022, which are the 57 full and 24 short papers presented in these books were carefully reviewed and selected from 279 submissions. The other six volumes present the workshop proceedings, containing 285 papers out of 815 submissions. These six volumes includes the proceedings of the following workshops: Advances in Artificial Intelligence Learning Technologies: Blended Learning, STEM, Computational Thinking and Coding (AAILT 2022); Workshop on Advancements in Applied Machine-learning and Data Analytics (AAMDA 2022); Advances in information Systems and Technologies for Emergency management, risk assessment and mitigation based on the Resilience (ASTER 2022); Advances in Web Based Learning (AWBL 2022); Blockchain and Distributed Ledgers: Technologies and Applications (BDLTA 2022); Bio and Neuro inspired Computing and Applications (BIONCA 2022); Configurational Analysis For Cities (CA Cities 2022); Computational and Applied Mathematics (CAM 2022), Computational and Applied Statistics (CAS 2022); Computational Mathematics, Statistics and Information Management (CMSIM); Computational Optimization and Applications (COA 2022); Computational Astrochemistry (CompAstro 2022); Computational methods for porous geomaterials (CompPor 2022); Computational

Approaches for Smart, Conscious Cities (CASCC 2022); Cities, Technologies and Planning (CTP 2022); Digital Sustainability and Circular Economy (DiSCE 2022); Econometrics and Multidimensional Evaluation in Urban Environment (EMEUE 2022); Ethical AI applications for a human-centered cyber society (EthicAI 2022); Future Computing System Technologies and Applications (FiSTA 2022); Geographical Computing and Remote Sensing for Archaeology (GCRSArcheo 2022); Geodesign in Decision Making: meta planning and collaborative design for sustainable and inclusive development (GDM 2022); Geomatics in Agriculture and Forestry: new advances and perspectives (GeoForAgr 2022); Geographical Analysis, Urban Modeling, Spatial Statistics (Geog-An-Mod 2022); Geomatics for Resource Monitoring and Management (GRMM 2022); International Workshop on Information and Knowledge in the Internet of Things (IKIT 2022); 13th International Symposium on Software Quality (ISSQ 2022); Land Use monitoring for Sustanability (LUMS 2022); Machine Learning for Space and Earth Observation Data (MALSEOD 2022); Building multi-dimensional models for assessing complex environmental systems (MES 2022); MOdels and indicators for assessing and measuring the urban settlement deVElopment in the view of ZERO net land take by 2050 (MOVEtoO 2022); Modelling Post-Covid cities (MPCC 2022); Ecosystem Services: nature's contribution to people in practice. Assessment frameworks, models, mapping, and implications (NC2P 2022); New Mobility Choices For Sustainable and Alternative Scenarios (NEMOB 2022); 2nd Workshop on Privacy in the Cloud/Edge/IoT World (PCEIoT 2022); Psycho-Social Analysis of Sustainable Mobility in The Pre- and Post-Pandemic Phase (PSYCHE 2022); Processes, methods and tools towards RESilient cities and cultural heritage prone to SOD and ROD disasters (RES 2022); Scientific Computing Infrastructure (SCI 2022); Socio-Economic and Environmental Models for Land Use Management (SEMLUM 2022); 14th International Symposium on Software Engineering Processes and Applications (SEPA 2022); Ports of the future - smartness and sustainability (SmartPorts 2022); Smart Tourism (SmartTourism 2022); Sustainability Performance Assessment: models, approaches and applications toward interdisciplinary and integrated solutions (SPA 2022); Specifics of smart cities development in Europe (SPEED 2022); Smart and Sustainable Island Communities (SSIC 2022); Theoretical and Computational Chemistryand its Applications (TCCMA 2022); Transport Infrastructures for Smart Cities (TISC 2022); 14th International Workshop on Tools and Techniques in Software Development Process (TTSDP 2022); International Workshop on Urban Form Studies (UForm 2022); Urban Regeneration: Innovative Tools and Evaluation Model (URITEM 2022); International Workshop on Urban Space and Mobilities (USAM 2022); Virtual and Augmented Reality and Applications (VRA 2022); Advanced and Computational Methods for Earth Science Applications (WACM4ES 2022); Advanced Mathematics and Computing Methods in Complex Computational Systems (WAMCM 2022).

As computer and internet technologies continue to advance at a fast pace, the rate of cybercrimes is increasing. Crimes employing mobile devices, data embedding/mining systems, computers, network communications, or any malware impose a huge threat to data security, while cyberbullying, cyberstalking, child pornography, and trafficking crimes are made easier through the anonymity of the internet. New developments in digital forensics tools and an understanding of current criminal activities can greatly assist in minimizing attacks on individuals, organizations, and society as a whole. Digital Forensics and Forensic Investigations: Breakthroughs in Research and Practice addresses current challenges and issues emerging in cyber forensics and new investigative tools and methods that can be adopted and implemented to address these issues and counter security breaches within various organizations. It also examines a variety of topics such as advanced techniques for forensic developments in computer and communication-link environments and legal perspectives including procedures for cyber investigations, standards, and policies. Highlighting a range of topics such as cybercrime, threat detection, and forensic science, this publication is an ideal reference source for security analysts, law enforcement, lawmakers, government officials, IT professionals, researchers, practitioners, academicians, and students currently investigating the up-and-coming aspects surrounding network security, computer science, and security engineering.

This book presents a detailed study of key points and block-based copy-move forgery detection techniques with a critical discussion about their pros and cons. It also highlights the directions for further development in image forgery detection. The book includes various publicly available standard image copy-move forgery datasets that are experimentally analyzed and presented with complete descriptions. Five different image copy-move forgery detection techniques are implemented to overcome the limitations of existing copy-move forgery detection techniques. The key focus of work is to reduce the computational time without adversely affecting the efficiency of these techniques. In addition, these techniques are also robust to geometric transformation attacks like rotation, scaling, or both.

Forensic Analysis of Digital Image Tampering

Information Hiding

Communication and Computing Systems

ICDCI 2021

9th International Workshop, IWDW 2010, Seoul, Korea, October 1-3, 2010, Revised Selected Papers

New Tools and Techniques

Proceedings of the 2nd International Conference on Communication and Computing Systems (ICCCS 2018), December 1-2, 2018, Gurgaon, India

This book gathers selected research papers presented at the International Conference on Communication and Intelligent Systems (ICCIS 2019), organised by Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Jaipur, India and Rajasthan Technical University, Kota, India on 9–10 November 2019. This book presents a collection of state-of-the-art research work involving cutting-edge technologies for communication and intelligent systems. Over the past few years, advances in artificial intelligence and machine learning have sparked new research efforts around the globe, which explore novel ways of developing intelligent systems and smart communication technologies. The book presents single- and multi-disciplinary research on these themes in order to make the latest results available in a single, readily accessible source.

"This 10-volume compilation of authoritative, research-based articles contributed by thousands of researchers and experts from all over the world emphasized modern issues and the presentation of potential opportunities, prospective solutions, and future directions in the field of information science and technology"--Provided by publisher.

This book presents the proceedings of the 2nd International Conference on Networks and Advances in Computational Technologies (NetACT19) which took place on July 23-25, 2019 at Mar Baselios College of Engineering and Technology in Thiruvananthapuram, India. The conference was in association with Bowie State University, USA, Gannon University, USA and Malardalen University, Sweden. Papers presented were included in technical programs that were part of five parallel tracks, namely Computer Application, Image Processing, Network Security, Hardware & Network Systems and Machine Learning. The proceedings brings together experts from industry, governments and academia from around the world with vast experiences in design, engineering and research. Presents the proceedings of the 2nd International Conference on Networks and Advances in Computational Technologies (NetACT19); Includes research in Computer Application, Image Processing, Network Security, Hardware & Network Systems and Machine Learning; Provides perspectives from industry, academia and government.

The first comprehensive and detailed presentation of techniques for authenticating digital images.

NetACT 19

8th International Workshop, IWDW 2009, Guildford, UK, August 24-26, 2009, Proceedings

Advances in Visual Computing

Tampering Detection Based on JPEG Analysis for Image Forensics

Digital Forensics and Cyber Crime

Proceedings of the 11th International Conference on Computer Engineering and Networks
Digital Image Forensics

The two volume sets LNCS 8033 and 8034 constitutes the refereed proceedings of the 9th International Symposium on Visual Computing, ISVC 2013, held in Rethymnon, Crete, Greece, in July 2013. The 63 revised full papers and 35 poster papers presented together with 32 special track papers were carefully reviewed and selected from more than 220 submissions. The papers are organized in topical sections: Part I (LNCS 8033) comprises computational bioimaging; computer graphics; motion, tracking and recognition; segmentation; visualization; 3D mapping, modeling and surface reconstruction; feature extraction, matching and recognition; sparse methods for computer vision, graphics and medical imaging; face processing and recognition. Part II (LNCS 8034) comprises topics such as visualization; visual computing with multimodal data streams; visual computing in digital cultural heritage; intelligent environments: algorithms and applications; applications; virtual reality.

Digital forensics and multimedia forensics are rapidly growing disciplines whereby electronic information is extracted and interpreted for use in a court of law. These two fields are finding increasing importance in law enforcement and the investigation of cybercrime as the ubiquity of personal computing and the internet becomes ever-more apparent. Digital forensics involves investigating computer systems and digital artefacts in general, while multimedia forensics is a sub-topic of digital forensics focusing on evidence extracted from both normal computer systems and special multimedia devices, such as digital cameras. This book focuses on the interface between digital forensics and multimedia forensics, bringing two closely related fields of forensic expertise together to identify and understand the current state-of-the-art in digital forensic investigation. Both fields are expertly attended to by contributions from researchers and forensic practitioners specializing in diverse topics such as forensic authentication, forensic triage, forensic photogrammetry, biometric forensics, multimedia device identification, and image forgery detection among many others. Key features: Brings digital and multimedia forensics together with contributions from academia, law enforcement, and the digital forensics industry for extensive coverage of all the major aspects of digital forensics of multimedia data and devices Provides comprehensive and authoritative coverage of digital forensics of multimedia data and devices Offers not only explanations of techniques but also real-world and simulated case studies to illustrate how digital and multimedia forensics techniques work Includes a companion website hosting continually updated supplementary materials ranging from extended and updated coverage of standards to best practice guides, test datasets and more case studies

Photographic imagery has come a long way from the pinhole cameras of the nineteenth century. Digital imagery, and its applications, develops in tandem with contemporary society's sophisticated literacy of this subtle medium. This book examines the ways in which digital images have become ever more ubiquitous as legal and medical evidence, just as they have become our primary source of news and have replaced paper-based financial documentation. Crucially, the contributions also analyze the very profound problems which have arisen alongside the digital image, issues of veracity and progeny that demand systematic and detailed response: It looks real, but is it? What camera captured it? Has it been doctored or subtly altered? Attempting to provide answers to these slippery issues, the book covers how digital images are created, processed and stored before moving on to set out the latest techniques for forensically examining images, and finally addressing practical issues such as courtroom admissibility. In an environment where even novice users can alter digital media, this authoritative publication will do much so stabilize public trust in these real, yet vastly flexible, images of the world

around us.

This book constitutes the refereed proceedings of the 10th Chinese Conference on Advances in Image and Graphics Technologies, IGTA 2015, held in Beijing, China, in June 2015. The 50 papers presented were carefully reviewed and selected from 138 submissions. They provide a forum for sharing new aspects of the progresses in the areas of image processing technology, image analysis und understanding, computer vision and pattern recognition, big data mining, computer graphics and VR, image technology application.

There is More to a Picture than Meets the Eye

IFIP International Conference on Digital Forensics, National Center for Forensic Science, Orlando, Florida, February 13-16, 2005

Digital Forensics and Forensic Investigations: Breakthroughs in Research and Practice

A Hands-on Practical Approach

Criminal Investigation Command (CID) Illustrative Crime Scene Forensics Presentations

Proceedings of International Conference on Deep Learning, Computing and Intelligence

Artificial Intelligence Applications and Innovations

This open access book provides the first comprehensive collection of studies dealing with the hot topic of digital face manipulation such as DeepFakes, Face Morphing, or Reenactment. It combines the research fields of biometrics and media forensics including contributions from academia and industry. Appealing to a broad readership, introductory chapters provide a comprehensive overview of the topic, which address readers wishing to gain a brief overview of the state-of-the-art. Subsequent chapters, which delve deeper into various research challenges, are oriented towards advanced readers. Moreover, the book provides a good starting point for young researchers as well as a reference guide pointing at further literature. Hence, the primary readership is academic institutions and industry currently involved in digital face manipulation and detection. The book could easily be used as a recommended text for courses in image processing, machine learning, media forensics, biometrics, and the general security area.

The use of digital photography has increased over the past few years, a trend which opens the door for new and creative ways to forge images. The manipulation of images through forgery influences the perception an observer has of the depicted scene, potentially resulting in ill consequences if created with malicious intentions. This poses a need to verify the authenticity of images originating from unknown sources in absence of any prior digital watermarking or authentication technique. This research explores the holes left by existing research; specifically, the ability to detect image forgeries created using multiple image sources and specialized methods tailored to the popular JPEG image format. In an effort to meet these goals, this thesis presents four methods to detect image tampering based on fundamental image attributes common to any forgery. These include discrepancies in 1) lighting and 2) brightness levels, 3) underlying edge inconsistencies, and 4) anomalies in JPEG compression blocks. Overall, these methods proved encouraging in detecting image forgeries with an observed accuracy of 60% in a completely blind experiment containing a mixture of 15 authentic and forged images.

Within modern forensic science and criminal investigation, experts face several challenges including managing huge amounts of data, handling miniscule pieces of evidence in a chaotic and complex environment, navigating traditional laboratory structures, and, sometimes, dealing with insufficient knowledge. These challenges must be overcome to avoid failure in investigation or miscarriage of justice. Technologies to Advance Automation in Forensic Science and Criminal Investigation provides a platform for researchers to present state-of-the-art technologies within forensic science and criminal investigation. Covering topics such as financial fraud, machine learning, and source camera identification, this book is an essential reference for criminal investigators, justice departments, law enforcement, legislators, computer scientists, automation professionals,

researchers, academicians, and students and educators in higher education.

This textbook provides an introduction to digital forensics, a rapidly evolving field for solving crimes. Beginning with the basic concepts of computer forensics, each of the book's 21 chapters focuses on a particular forensic topic composed of two parts: background knowledge and hands-on experience through practice exercises. Each theoretical or background section concludes with a series of review questions, which are prepared to test students' understanding of the materials, while the practice exercises are intended to afford students the opportunity to apply the concepts introduced in the section on background knowledge. This experience-oriented textbook is meant to assist students in gaining a better understanding of digital forensics through hands-on practice in collecting and preserving digital evidence by completing various exercises. With 20 student-directed, inquiry-based practice exercises, students will better understand digital forensic concepts and learn digital forensic investigation techniques. This textbook is intended for upper undergraduate and graduate-level students who are taking digital-forensic related courses or working in digital forensics research. It can also be used by digital forensics practitioners, IT security analysts, and security engineers working in the IT security industry, particular IT professionals responsible for digital investigation and incident handling or researchers working in these related fields as a reference book.

Fundamental Computing Forensics for Africa

Communication and Intelligent Systems

Proceedings of ICICV 2021

BDCC 2018

9th International Symposium, ISVC 2013, Rethymnon, Crete, Greece, July 29-31, 2013. Proceedings, Part II

Introductory Computer Forensics

Information Systems Security

This book presents high-quality, peer-reviewed papers from the International Conference on "Innovations in Computational Intelligence and Computer Vision (ICICV 2021)," hosted by Manipal University Jaipur, Rajasthan, India, on August 5–6, 2021. Offering a collection of innovative ideas from researchers, scientists, academics, industry professionals and students, the book covers a variety of topics, such as artificial intelligence and computer vision, image processing and video analysis, applications and services of artificial intelligence and computer vision, interdisciplinary areas combining artificial intelligence and computer vision, and other innovative practices. Unleashing the Art of Digital Forensics is intended to describe and explain the steps taken during a forensic examination, with the intent of making the reader aware of the constraints and considerations that apply during a forensic examination in law enforcement and in the private sector. Key Features: • Discusses the recent advancements in Digital Forensics and Cybersecurity • Reviews detailed applications of Digital

Forensics for real-life problems • Addresses the challenges related to implementation of Digital Forensics and Anti-Forensic approaches • Includes case studies that will be helpful for researchers • Offers both quantitative and qualitative research articles, conceptual papers, review papers, etc. • Identifies the future scope of research in the field of Digital Forensics and Cybersecurity. This book is aimed primarily at and will be beneficial to graduates, postgraduates, and researchers in Digital Forensics and Cybersecurity.

This book constitutes the refereed proceedings of the 10th International Conference on Information Systems Security, ICISS 2014, held in Hyderabad, India, in December 2014. The 20 revised full papers and 5 short papers presented together with 3 invited papers were carefully reviewed and selected from 129 submissions. The papers address the following topics: security inferences; security policies; security user interfaces; security attacks; malware detection; forensics; and location based security services.

This book constitutes the refereed proceedings of the 12th International Conference on Information Hiding, IH 2010, held in Calgary, AB, Canada, in June 2010. The 18 revised full papers presented were carefully reviewed and selected from 39 submissions.

Cryptographic and Information Security Approaches for Images and Videos

Image Copy-move Forgery Detection

Handbook of Digital Face Manipulation and Detection

20th International Workshop, IWDW 2021, Beijing, China, November 20–22, 2021, Revised Selected Papers

11th EAI International Conference, ICDF2C 2020, Boston, MA, USA, October 15-16, 2020, Proceedings

Unleashing the Art of Digital Forensics

This proceeding features papers discussing big data innovation for sustainable cognitive computing. The papers feature detail on cognitive computing and its self-learning systems that use data mining, pattern recognition and natural language processing (NLP) to mirror the way the human brain works. This international conference focuses on cognitive computing technologies, from knowledge representation techniques and natural language processing algorithms to dynamic learning approaches. Topics covered include Data Science for Cognitive Analysis, Real-

Time Ubiquitous Data Science, Platform for Privacy Preserving Data Science, and Internet-Based Cognitive Platform. The EAI International Conference on Big Data Innovation for Sustainable Cognitive Computing (BDCC 2018), took place on 13 – 15 December 2018 in Coimbatore, India.

This book constitutes the refereed proceedings of the 16th International Workshop on Digital Forensics and Watermarking, IWDW 2017, held in Magdeburg, Germany, in August 2017. The 30 papers presented in this volume were carefully reviewed and selected from 48 submissions. The contributions are covering the state-of-the-art theoretical and practical developments in the fields of digital watermarking, steganography and steganalysis, forensics and anti-forensics, visual cryptography, and other multimedia-related security issues. Also included are the papers on two special sessions on biometric image tampering detection and on emerging threats of criminal use of information hiding : usage scenarios and detection approaches.

The International Conference on Communication and Computing Systems (ICCCS 2018) provides a high-level international forum for researchers and recent advances in the field of electronic devices, computing, big data analytics, cyber security, quantum computing, biocomputing, telecommunication, etc. The aim of the conference was to bridge the gap between the technological advancements in the industry and the academic research.

This book discusses blind investigation and recovery of digital evidence left behind on digital devices, primarily for the purpose of tracing cybercrime sources and criminals. It presents an overview of the challenges of digital image forensics, with a specific focus on two of the most common forensic problems. The first part of the book addresses image source investigation, which involves mapping an image back to its camera source to facilitate investigating and tracing the source of a crime. The second part of the book focuses on image-forgery detection, primarily focusing on "copy-move forgery" in digital images, and presenting effective solutions to copy-move forgery detection with an emphasis on additional related challenges such as blur-invariance, similar genuine object identification, etc. The book concludes with future research directions, including counter forensics. With the necessary mathematical information in every chapter, the book serves as a useful reference resource for researchers and professionals alike. In addition, it can also be used as a supplementary text for upper-undergraduate and graduate-level courses on "Digital Image Processing", "Information Security", "Machine Learning", "Computer Vision" and "Multimedia Security and Forensics".

Technologies to Advance Automation in Forensic Science and Criminal Investigation

16th International Workshop , IWDW 2017, Magdeburg, Germany, August 23-25, 2017, Proceedings

Proceedings of ICCET 2019

Photo Forensics

16th IFIP WG 12.5 International Conference, AIAI 2020, Neos Marmaras, Greece, June 5–7, 2020, Proceedings, Part II

Digital Forensics and Watermarking

AI and Cloud Computing

This book presents a general introduction to the computational aspects of forensic science, covering the different

tools needed for forensic investigations, the importance of forensics and biometrics, and the use of Benford's law for biometrics and network traffic analysis. It specifically focuses on the application of these techniques in Africa, and how they can be of benefit in the investigation of crime in Nigeria in particular.
Proceedings of ICCIS 2019