## Contents

Preface		iii
Ack	knowledgement	iv
	Part 1: Crime Science	
1.	Unraveling the Notre-Dame Cathedral Fire in Space and Time: An X-coherence Approach	3
	Rafael Padilha, Fernanda A Andaló, Luís A M Pereira and Anderson Rocha	
2.	Using Gesture Recognition to Prevent Drowning: A Crime Science Perspective	20
	Anthony C Ijeh and Ahmed Naufal AL Masri	
3.	Modelling Criminal Investigation: Process, Quality and Requirements	41
	Stig Andersen and Jens Petter Fossdal	
4.	Digital Investigation and the Trojan Defense, Revisited Golden G Richard III, Andrew Case, Modhuparna Manna, Elsa A M Hahne and Aisha Ali-Gombe	67
	Part 2: Digital Forensics	
5.	Law Enforcement Agencies in Europe and the Use of Hacking Tools During Investigations: Some Legal Informatics, Civil Rights and Data Protection Issues	87
	Giovanni Ziccardi	
6.	Mobile Forensics—Tools, Techniques and Approach  Manish Kumar	102
7.	Digital Forensics of Cyber Physical Systems and the Internet of Things	117
	Sandhya Armoogum, Patricia Khonie and Xiaoming Li	

vi	Crime Science and Digital Forensics: A Holistic View	
8.	Social Media Crime Investigation and Forensic Analysis  Manish Kumar	149
	Part 3: Cyber Security	
9.	Bayesian Networks and Cyber-Crime Investigations Richard E Overill and Kam-Pui Chow	167
10.	The Future of Democracy in a Cyber-Security Framework  Marios Panagiotis Efthymiopoulos and Kleanthis Kyriakidis	183
11.	Is it a Cyber Security Strategy for Social Development?  Anthony C Ijeh	202
12.	NATO's Current and Future Cyber-Defence Adaptability	218

241

Marios Panagiotis Efthymiopoulos

Index