

CONTENTS

*List of Contributors*      page x  
*Foreword*      xv  
*Acknowledgments*      xviii  
*Table of Cases*      xx  
*Table of Statutes*      xxv  
*Table of Council of Europe Instruments*      xxxi  
*Table of Other Council of Europe Materials*      xxxii  
*Table of European Union Instruments*      xxxiii  
*Table of Other European Union Materials*      xxxv  
*Table of Other Materials*      xxxvi  
*List of Abbreviations*      xxxvii

Introduction      1  
SABINE GLESS AND HELENA WHALEN-BRIDGE

PART I      **Human–Robot Interactions and  
Substantive Law**

1    The Challenges of Human–Robot Interaction for  
    Substantive Criminal Law: Mapping the Field      5  
    TATJANA HÖRNLE

2    Are Programmers in or out of Control? The Individual  
    Criminal Responsibility of Programmers of  
    Autonomous Weapons and Self-Driving Cars      23  
    MARTA BO

3    Trusting Robots: Limiting Due Diligence Obligations  
    in Robot-Assisted Surgery under Swiss Criminal Law      49  
    JANNEKE DE SNAIJER

|   |   |
|---|---|
| viii  | CONTENTS  |
| 4   | Forms of Robot Liability: Criminal Robots and Corporate Criminal Responsibility 73<br>THOMAS WEIGEND  |
| PART II Human–Robot Interactions and Procedural Law   |   |
| 5   | Introduction to Human–Robot Interaction and Procedural Issues in Criminal Justice 89<br>SABINE GLESS  |
| 6   | Human Psychology and Robot Evidence in the Courtroom, Alternative Dispute Resolution, and Agency Proceedings 111<br>SARA SUN BEALE AND HAYLEY LAWRENCE            |
| 7   | Principles to Govern Regulation of Digital and Machine Evidence 141<br>ANDREA ROTH  |
| 8   | Robot Testimony? A Taxonomy and Standardized Approach to the Use of Evaluative Data in Criminal Proceedings 167<br>EMILY SILVERMAN, JÖRG ARNOLD, AND SABINE GLESS |
| 9   | Digital Evidence Generated by Consumer Products: The Defense Perspective 193<br>ERIN E. MURPHY  |
| 10  | Data as Evidence in Criminal Courts: Comparing Legal Frameworks and Actual Practices 221<br>BART CUSTERS AND LONNEKE STEVENS                                      |
| 11  | Reconsidering Two US Constitutional Doctrines: Fourth Amendment Standing and the State Agency Requirement in a World of Robots 253<br>DAVID GRAY                  |
| PART III Human–Robot Interactions and Legal Narrative |   |
| 12  | Narrative Approaches to Human–Robot Interaction and the Law 281<br>HELENA WHALEN-BRIDGE   |

CONTENTS ix

|    |  |     |
|----|--|-----|
| 13 | The Case of the Stupid Robot   | 287 |
|    | FRODE HELMICH PEDERSEN   |     |
| 14 | Inevitable or Not? Narrative Arguments Regarding<br>Autonomous Vehicles in Singapore   | 311 |
|    | HELENA WHALEN-BRIDGE   |     |
| 15 | “The Knowledge of Causes and the Secret Motions of<br>Things”: The Interdisciplinary and Doctrinal Challenges<br>of Automated Driving Systems and Criminal Law | 335 |
|    | JEANNE GAAKEER   |     |
|    | <i>Index</i>   | 359 |