CONTENTS

List of Contributors page x Foreword Acknowledgments xviii Table of Cases XXTable 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*

Introduction 1
SABINE GLESS AND HELENA WHALEN-BRIDGE

PART I Human-Robot Interactions and Substantive Law

- The Challenges of Human–Robot Interaction for Substantive Criminal Law: Mapping the Field 5
 TATIANA HÖRNLE
- Are Programmers in or out of Control? The Individual Criminal Responsibility of Programmers of Autonomous Weapons and Self-Driving Cars
 MARTA BO
- Trusting Robots: Limiting Due Diligence Obligations in Robot-Assisted Surgery under Swiss Criminal Law
 JANNEKE DE SNAIJER

viii CONTENTS

4 Forms of Robot Liability: Criminal Robots and Corporate Criminal Responsibility 73

THOMAS WEIGEND

PART II Human-Robot Interactions and Procedural Law

- 5 Introduction to Human–Robot Interaction and Procedural Issues in Criminal Justice 89 SABINE GLESS
- Human Psychology and Robot Evidence in the Courtroom,
 Alternative Dispute Resolution, and Agency Proceedings
 SARA SUN BEALE AND HAYLEY LAWRENCE
- 7 Principles to Govern Regulation of Digital and Machine Evidence 141
 ANDREA ROTH
- 8 Robot Testimony? A Taxonomy and Standardized Approach to the Use of Evaluative Data in Criminal Proceedings 167
 EMILY SILVERMAN, JÖRG ARNOLD, AND SABINE GLESS
- Digital Evidence Generated by Consumer Products:
 The Defense Perspective 193
 ERIN E. MURPHY
- Data as Evidence in Criminal Courts: Comparing Legal
 Frameworks and Actual Practices 221
 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
 DAVID GRAY

PART III Human-Robot Interactions and Legal Narrative

12 Narrative Approaches to Human–Robot Interaction and the Law 281
HELENA WHALEN-BRIDGE

CONTENTS ix

13 The Case of the Stupid Robot 287

FRODE HELMICH PEDERSEN

- Inevitable or Not? Narrative Arguments Regarding Autonomous Vehicles in Singapore 311
 HELENA WHALEN-BRIDGE
- "The Knowledge of Causes and the Secret Motions of Things": The Interdisciplinary and Doctrinal Challenges of Automated Driving Systems and Criminal Law 335
 JEANNE GAAKEER

Index 359