

# Contents

## Part I Fundamental and Legal Questions

|   |                                                                                                                                          |    |
|---|------------------------------------------------------------------------------------------------------------------------------------------|----|
| 1 | <b>Legal Fundamentalism: Is Data Protection Really a Fundamental Right?</b> .....                                                        | 3  |
|   | Bart van der Sloot                                                                                                                       |    |
| 2 | <b>Is There a Right to Offline Alternatives in a Digital World?</b> .....                                                                | 31 |
|   | Murat Karaboga, Tobias Matzner, Hannah Obersteller, and Carsten Ochs                                                                     |    |
| 3 | <b>What Is New with the Internet of Things in Privacy and Data Protection? Four Legal Challenges on Sharing and Control in IoT</b> ..... | 59 |
|   | Ugo Pagallo, Massimo Durante, and Shara Monteleone                                                                                       |    |

## Part II Concepts and Tools

|   |                                                                                                                                                  |     |
|---|--------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| 4 | <b>Towards a Code of Conduct on Privacy for mHealth to Foster Trust Amongst Users of Mobile Health Applications</b> .....                        | 81  |
|   | Eugenio Mantovani, Joan Antokol, Marian Hoekstra, Sjaak Nouwt, Nico Schutte, Pēteris Zilgalvis, J.-P. Castro Gómez-Valadés, and Claudia Prettner |     |
| 5 | <b>Minimum Harm by Design: Reworking Privacy by Design to Mitigate the Risks of Surveillance</b> .....                                           | 107 |
|   | Elisa Orrù                                                                                                                                       |     |
| 6 | <b>A Purpose-Based Taxonomy for Better Governance of Personal Data in the Internet of Things Era: The Example of Wellness Data</b> .....         | 139 |
|   | Claire Levallois-Barth and Hugo Zylberberg                                                                                                       |     |

|          |                                                                                                                                                    |            |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>7</b> | <b>A Privacy Engineering Framework for the Internet of Things</b> .....                                                                            | <b>163</b> |
|          | Antonio Kung, Frank Kargl, Santiago Suppan,<br>Jorge Cuellar, Henrich C. Pöhls, Adam Kapovits,<br>Nicolás Notario McDonnell, and Yod Samuel Martin |            |

### **Part III Case Studies**

|           |                                                                                                                                                                     |            |
|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| <b>8</b>  | <b>Dangers from Within? Looking Inwards at the Role of Maladministration as the Leading Cause of Health Data Breaches in the UK</b> .....                           | <b>205</b> |
|           | Leslie Stevens, Christine Dobbs, Kerina Jones,<br>and Graeme Laurie                                                                                                 |            |
| <b>9</b>  | <b>On the Road to Privacy- and Data Protection-Friendly Security Technologies in the Workplace – A Case-Study of the MUSES Risk and Trust Analysis Engine</b> ..... | <b>241</b> |
|           | Yung Shin Van Der Sype, Jonathan Guislain,<br>Jean-Marc Seigneur, and Xavier Titi                                                                                   |            |
| <b>10</b> | <b>A Study on Corporate Compliance with Transparency Requirements of Data Protection Law</b> .....                                                                  | <b>271</b> |
|           | Christoph Bier, Simon Kömpf, and Jürgen Beyerer                                                                                                                     |            |

### **Part IV Closing**

|           |                                                                                                   |            |
|-----------|---------------------------------------------------------------------------------------------------|------------|
| <b>11</b> | <b>Closing remarks: 9th International Computers, Privacy and Data Protection Conference</b> ..... | <b>293</b> |
|           | Giovanni Buttarelli                                                                               |            |