

The Blackwell Guide to the Philosophy of Computing and Information

Edited by
Luciano Floridi



Contents

Notes on Contributors	viii
Preface	xi
Part I: Four Concepts	1
1 Computation <i>B. Jack Copeland</i>	3
2 Complexity <i>Alasdair Urquhart</i>	18
3 System: An Introduction to Systems Science <i>Klaus Mainzer</i>	28
4 Information <i>Luciano Floridi</i>	40
Part II: Computers in Society	63
5 Computer Ethics <i>Deborah G. Johnson</i>	65
6 Computer-mediated Communication and Human–Computer Interaction <i>Charles Ess</i>	76
7 Internet Culture <i>Wesley Cooper</i>	92
8 Digital Art <i>Dominic McIver Lopes</i>	106

Part III: Mind and AI	117
9 The Philosophy of AI and its Critique <i>James H. Fetzer</i>	119
10 Computationalism, Connectionism, and the Philosophy of Mind <i>Brian P. McLaughlin</i>	135
Part IV: Real and Virtual Worlds	153
11 Ontology <i>Barry Smith</i>	155
12 Virtual Reality <i>Derek Stenovsky</i>	167
13 The Physics of Information <i>Eric Steinhart</i>	178
14 Cybernetics <i>Roberto Cordeschi</i>	186
15 Artificial Life <i>Mark A. Bedau</i>	197
Part V: Language and Knowledge	213
16 Information and Content <i>Jonathan Cohen</i>	215
17 Knowledge <i>Fred Adams</i>	228
18 The Philosophy of Computer Languages <i>Graham White</i>	237
19 Hypertext <i>Thierry Bardini</i>	248
Part VI: Logic and Probability	261
20 Logic <i>G. Aldo Antonelli</i>	263
21 Probability in Artificial Intelligence <i>Donald Gillies</i>	276
22 Game Theory: Nash Equilibrium <i>Cristina Bicchieri</i>	289

Part VII: Science and Technology	305
23 Computing in the Philosophy of Science <i>Paul Thagard</i>	307
24 Methodology of Computer Science <i>Timothy Colburn</i>	318
25 Philosophy of Information Technology <i>Carl Mitcham</i>	327
26 Computational Modeling as a Philosophical Methodology <i>Patrick Grim</i>	337
Index	350