

Detailed Contents

<i>List of Figures</i>	<i>page</i> xi
<i>List of Illustrations of Algorithmic Regulation</i>	xiii
<i>Preface</i>	xv
<i>Acknowledgements</i>	xvii
<i>Table of Cases</i>	xix
<i>List of Abbreviations</i>	xxiii
1 Introduction	1
1.1 Aligning Algorithmic Regulation and the Rule of Law	1
1.1.1 The Algorithmic Leviathan	1
1.1.2 Algorithmic Regulation and the Rule of Law	6
1.1.3 The EU's Rule of Law Crisis and the Rule <i>by</i> Law	10
1.1.4 Bridging Two Agendas and Countering <i>Algorithmic Rule by Law</i>	15
1.2 Research Approach	18
1.2.1 Objectives, Questions and Hypotheses	18
1.2.2 Methodology	19
1.2.3 Scope of This Book	21
1.2.4 Relevance	24
2 Algorithmic Regulation	26
2.1 Technical Aspects	26
2.1.1 Algorithms	27
2.1.2 Knowledge-Driven Systems	30
2.1.3 Data-Driven Systems	34
2.1.4 Comparing Approaches	41
2.1.5 AI Systems	44

2.2	Societal Aspects	50
2.2.1	Algorithmic Systems as Socio-technical Infrastructure	51
2.2.2	Risk of Human Error	55
2.2.3	Risk of Bias	57
2.2.4	Opacity	59
2.2.5	Dependency on Data and Proxies	62
2.2.6	Impact on Human Agency	66
2.3	Algorithmic Regulation in the Public Sector	69
2.3.1	The Organisation of Public Authorities	70
2.3.2	The Pitfalls of Bureaucracy	73
2.3.3	Administrative Acts in between Rules and Discretion	78
2.3.4	From Bureaucracy to Algocracy	82
2.3.5	Rationale of Algorithmic Regulation	87
2.4	Concluding Remarks	93
3	The Rule of Law	95
3.1	A Theoretical Introduction to the Rule of Law	96
3.1.1	A Plethora of Definitions	96
3.1.2	The Spirit of the Rule of Law	99
3.1.3	Formal and Substantive Notions of the Rule of Law	101
3.1.4	The Rule of Law and the Rule by Law	105
3.2	The Rule of Law in the European Union	109
3.2.1	The Rule of Law and the Council of Europe	110
3.2.2	The Rule of Law's Origins in the EU Legal Order	112
3.2.3	Vertical and Horizontal Dimensions	114
3.2.4	The EU Conceptualisation of the Rule of Law	117
3.2.5	The Rule of Law's Fragility: A Tale of Caution	121
3.3	The Rule of Law as Normative Framework	125
3.3.1	Legality	126
3.3.1.a	The Principle's Requirements	126
3.3.1.b	Challenges to the Principle of Legality	129
3.3.2	Legal Certainty	131
3.3.2.a	The Principle's Requirements	131
3.3.2.b	Challenges to the Principle of Legal Certainty	132
3.3.3	Non-arbitrariness of the Executive Powers	133
3.3.3.a	The Principle's Requirements	133
3.3.3.b	Challenges to the Principle of Non-arbitrariness	135
3.3.4	Equality before the Law	138
3.3.4.a	The Principle's Requirements	138
3.3.4.b	Challenges to the Principle of Equality	139

3.3.5	Judicial Review	140
3.3.5.a	The Principle's Requirements	140
3.3.5.b	Challenges to the Principle of Effective Judicial Review	142
3.3.6	Separation of Powers	144
3.3.6.a	The Principle's Requirements	144
3.3.6.b	Challenges to the Principle of the Separation of Powers	147
3.4	Concluding Remarks	149
4	From Rule of Law to Algorithmic Rule by Law	151
4.1	Algorithmic Regulation and the Rule of Law	151
4.1.1	Legality	152
4.1.1.a	Lost in Translation	153
4.1.1.b	From Legality to Legalism	157
4.1.1.c	Loss of Process Transparency	161
4.1.2	Legal Certainty	164
4.1.2.a	Fanciful Foreseeability	165
4.1.2.b	Problematic Preservation of the Past	169
4.1.2.c	Loss of Implementation Transparency	171
4.1.3	Non-arbitrariness	173
4.1.3.a	Optimising Efficiency over Justice	174
4.1.3.b	Reducing Explainability	176
4.1.3.c	Diminishing Discretion	177
4.1.4	Equality before the Law	181
4.1.4.a	Risk of Scaled Bias	181
4.1.4.b	Exacerbating Societal Inequality	184
4.1.4.c	Loss of Comparability	187
4.1.5	Judicial Review	190
4.1.5.a	Informational Limits for Review	191
4.1.5.b	Difficult Access to a Remedy	195
4.1.5.c	Lack of Systemic Review	198
4.1.6	Separation of Powers	199
4.1.6.a	Strengthening the Executive	200
4.1.6.b	Privatising Legal Infrastructure	201
4.1.6.c	Citizen Surveillance	202
4.2	Algorithmic Rule by Law	205
4.2.1	Primacy of Techno-rationality	207
4.2.2	Supremacy of Coders	210
4.2.3	Automation of Legalism	213
4.2.4	Deficit of Accountability	218
4.2.5	Systemic Vulnerability	221

4.3	Concluding Remarks	225
5	Legal Safeguards in the EU Legal Order	230
5.1	A Note on EU Competences in the Field	231
5.2	Regulation Pertaining to the Rule of Law	232
5.2.1	Article 2 and 7 TEU	233
5.2.2	The Conditionality Regulation	237
5.2.3	Infringement Actions and Proceedings before National Courts	246
5.3	Regulation Pertaining to Personal Data: The GDPR	255
5.3.1	Need for a Legal Basis	257
5.3.2	Automated Decision-Making	259
5.3.3	Evaluation: Necessary but Not Sufficient	261
5.4	Regulation Pertaining to Algorithmic Systems: The AI Act	264
5.4.1	The AI Act's Goals and Scope	265
5.4.1.a	The AI Act's Origins	265
5.4.1.b	Objectives and Legal Basis	266
5.4.1.c	AI's Definition	268
5.4.2	The AI Act's Regulatory Architecture	270
5.4.3	Algorithmic Regulation in the AI Act	274
5.4.3.a	Prohibited Practices	274
5.4.3.b	Systems Requiring Additional Transparency	276
5.4.3.c	General-Purpose AI Models	276
5.4.3.d	High-Risk Systems	278
5.4.4	High-Risk Algorithmic Regulation	282
5.4.4.a	Requirements for High-Risk Systems	282
5.4.4.b	Additional Obligations for Deployers	286
5.4.5	A Low Ceiling	288
5.4.6	Evaluation: The Return of Techno-supremacy	291
5.5	Concluding Remarks	294
6	Conclusions	297
6.1	Summary	297
6.2	Recommendations	302
6.2.1	Acknowledging the Threat of Algorithmic Rule by Law	303
6.2.2	Strengthening Legal Safeguards	304
6.2.3	Promoting Further Research	307
6.3	Embracing Normative Complexity	309
	<i>Bibliography</i>	311
	<i>Index</i>	345