Contents

Preface 7

Learning Algorithms
What is Artificial Intelligence Really Capable of?
Rainer Berkemer, Markus Grottke 9

Transgressing the Boundaries
Towards a Rigorous Understanding of Deep Learning and Its (Non-)Robustness
Carsten Hartmann, Lorenz Richter 43

Limits and Prospects of Ethics in the Context of Law and Society by the Example of Accident Algorithms of Autonomous Driving
Peter Klimczak 83

Limits and Prospects of Big Data and Small Data Approaches in AI Applications
Ivan Kraljevski, Constanze Tschöpe, Matthias Wolff 115

Artificial Intelligence and/as Risk
Isabel Kusche 143

When You Can't Have What You Want
Measuring Users' Ethical Concerns about Interacting with AI Assistants Using MEESTAR
Kati Nowack 163

Man-Machines
Gynoids, Fembots, and Body-AI in Contemporary Cinematic Narratives
Christer Petersen 195

Trends in Explainable Artificial Intelligence for Non-Experts
Elise Özalp, Katrin Hartwig, Christian Reuter 223

Machine Dreaming
Stefan Rieger 245

Let's Fool That Stupid AI
Adversarial Attacks against Text Processing AI
Ulrich Schade, Albert Pritzkau, Daniel Claeser, Steffen Winandy 267

Authors 285