

Contents

CHAPTER 1	
Do Algorithms Dream About Artificial Alphas?	1
<i>By Michael Kollo</i>	
CHAPTER 2	
Taming Big Data	13
<i>By Rado Lipuš and Daryl Smith</i>	
CHAPTER 3	
State of Machine Learning Applications in Investment Management	33
<i>By Ekaterina Sirotyuk</i>	
CHAPTER 4	
Implementing Alternative Data in an Investment Process	51
<i>By Vinesh Jha</i>	
CHAPTER 5	
Using Alternative and Big Data to Trade Macro Assets	75
<i>By Saeed Amen and Iain Clark</i>	
CHAPTER 6	
Big Is Beautiful: How Email Receipt Data Can Help Predict Company Sales	95
<i>By Giuliano De Rossi, Jakub Kolodziej and Gurvinder Brar</i>	
CHAPTER 7	
Ensemble Learning Applied to Quant Equity: Gradient Boosting in a Multifactor Framework	129
<i>By Tony Guida and Guillaume Coqueret</i>	
CHAPTER 8	
A Social Media Analysis of Corporate Culture	149
<i>By Andy Moniz</i>	

CHAPTER 9	
Machine Learning and Event Detection for Trading Energy Futures	169
<i>By Peter Hafez and Francesco Lautizi</i>	
CHAPTER 10	
Natural Language Processing of Financial News	185
<i>By M. Berkan Sesen, Yazann Romahi and Victor Li</i>	
CHAPTER 11	
Support Vector Machine-Based Global Tactical Asset Allocation	211
<i>By Joel Guglietta</i>	
CHAPTER 12	
Reinforcement Learning in Finance	225
<i>By Gordon Ritter</i>	
CHAPTER 13	
Deep Learning in Finance: Prediction of Stock Returns with Long Short-Term Memory Networks	251
<i>By Miquel N. Alonso, Gilberto Batres-Estrada and Aymeric Moulin</i>	
Biography	279