CONTENTS

1 Introduction 1

The Dawn of AI as a Consumer Product 3

AI Shakes Up Entertainment 7

Predictive AI: An Extraordinary Claim That Requires Extraordinary Evidence 9

Painting AI with a Single Brush Is Tempting but Flawed 12

A Series of Curious Circumstances Led to This Book 18

The AI Hype Vortex 21

What Is AI Snake Oil? 26

Who This Book Is For 34

2 How Predictive AI Goes Wrong 36

Predictive AI Makes Life-Altering Decisions 38

A Good Prediction Is Not a Good Decision 43

Opaque AI Incentivizes Gaming 46

Overautomation 48

Predictions about the Wrong People 51

Predictive AI Exacerbates Existing Inequalities 53
A World without Prediction 56
Concluding Thoughts 58

3 Why Can't AI Predict the Future? 60

A Brief History of Predicting the Future Using Computers 62
Getting Specific 67
The Fragile Families Challenge 70
Why Did the Fragile Families Challenge End in Disappointment? 73
Predictions in Criminal Justice 78
Failure Is Hard. What about Success? 81
The Meme Lottery 86
From Individuals to Aggregates 90
Recap: Reasons for Limits to Prediction 97

4 The Long Road to Generative AI 99

Generative AI Is Built on a Long Series of Innovations Dating Back Eighty Years 105
Failure and Revival 107
Training Machines to "See" 111
The Technical and Cultural Significance of ImageNet 114
Classifying and Generating Images 118
Generative AI Appropriates Creative Labor 122
AI for Image Classification Can Quickly Become AI for Surveillance 127

From Images to Text 129
From Models to Chatbots 133
Automating Bullshit 139
Deepfakes, Fraud, and Other Malicious Uses 142
The Cost of Improvement 143
Taking Stock 146

5 Is Advanced AI an Existential Threat? 150

What Do the Experts Think? 151
The Ladder of Generality 156
What's Next on the Ladder? 162
Accelerating Progress? 165
Rogue AI? 168
A Global Ban on Powerful AI? 172
A Better Approach: Defending against Specific Threats 174
Concluding Thoughts 177

6 Why Can't AI Fix Social Media? 179

When Everything Is Taken Out of Context 183
Cultural Incompetence 188
AI Excels at Predicting . . . the Past 194
When AI Goes Up against Human Ingenuity 198
A Matter of Life and Death 201
Now Add Regulation into the Mix 205
The Hard Part Is Drawing the Line 209

Recap: Seven Shortcomings of AI for Content Moderation 216
A Problem of Their Own Making 218
The Future of Content Moderation 223

7 Why Do Myths about AI Persist? 227

AI Hype Is Different from Previous Technology Hype 231
The AI Community Has a Culture and History of Hype 235
Companies Have Few Incentives for Transparency 239
The Reproducibility Crisis in AI Research 241
News Media Misleads the Public 247
Public Figures Spread AI Hype 251
Cognitive Biases Lead Us Astray 255

8 Where Do We Go from Here? 258

AI Snake Oil Is Appealing to Broken Institutions 261
Embracing Randomness 265
Regulation: Cutting through the False Dichotomy 268
Limitations of Regulation 274
AI and the Future of Work 276
Growing Up with AI in Kai's World 281
Growing Up with AI in Maya's World 285

Acknowledgments 291
References 293
Index 331