## Contents

Acknowledgments	xi
Prelude: The Tale of the Omega Team	3
Welcome to the Most Important Conversation of Our Time A Brief History of Complexity	22
The Three Stages of Life Controversies Misconceptions	
The Road Ahead	
Matter Turns Intelligent What Is Intelligence? What Is Memory? What Is Computation? What Is Learning?	49
The Near Future: Breakthroughs, Bugs, Laws, Weapons and Jobs Breakthroughs Bugs vs. Robust AI	82
Laws Weapons Jobs and Wages	
	Prelude: The Tale of the Omega Team  Welcome to the Most Important Conversation of Our Time  A Brief History of Complexity  The Three Stages of Life Controversies Misconceptions The Road Ahead  Matter Turns Intelligent What Is Intelligence? What Is Memory? What Is Computation? What Is Learning?  The Near Future: Breakthroughs, Bugs, Laws, Weapons and Jobs Breakthroughs Bugs vs. Robust AI Laws Weapons

Contents ix

281

316

337

349