THE POWER OF Computational Thinking

Games, magic and puzzles to help you become a computational thinker

Paul Curzon Peter W McOwan

Queen Mary University of London, UK



Contents

Preface	v
About the Authors	vii
A cknowledgements	ix
Chapter 1. Future Thinking	1
Chapter 2. Searching to Speak	7
Chapter 3. Magic and Algorithms	27
Chapter 4. Puzzles, Logic and Patterns	49
Chapter 5. Puzzling Tours	65
Chapter 6. Bot Building for Human Beginners	81
Chapter 7. Build a Brain	97
Chapter 8. Building a Scam Bot	115
Chapter 9. Grids, Graphics and Games	125
Chapter 10. Seeing the Wood and the Trees	143
Chapter 11. Medical Marvels Inside Out	161
Chapter 12. Computers vs Your Brain	173
Chapter 13. So What is Computational Thinking?	195
Further Reading	211
Index	217

٩