



Turing's Legacy **Cambridge University Press**

Contributors

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Turing's Legacy

Developments from Turing's Ideas in Logic

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Alan Turing was an inspirational figure who is now recognised as a genius of modern mathematics. In addition to leading the Allied forces' code-breaking effort at Bletchley Park in World War II, he proposed the theoretical foundations of modern computing and anticipated developments in areas from information theory to computer chess. His ideas have been extraordinarily influential in modern mathematics and this book traces such developments by bringing together essays by leading experts in logic, artificial intelligence, computability theory and related areas. Together, they give insight into this fascinating man, the development of modern logic, and the history of ideas. The articles within cover a diverse selection of topics, such as the development of formal proof, differing views on the Church–Turing thesis, the development of combinatorial group theory, and Turing's work on randomness which foresaw the ideas of algorithmic randomness that would emerge many years later.

- Traces the progression of Turing's ideas and the subsequent development of many major areas of logic
- Contains essays by leading experts that reveal cutting-edge perspectives on Turing's ideas
- The book is broad in scope and explores developments in artificial intelligence, computability theory, higher recursion, formal proof, and beyond

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