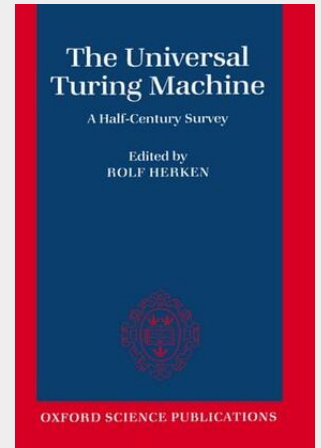


UNIVERSAL TURING MACHINE REV/E

This volume commemorates the work of Alan Turing, because it was Turing who not only introduced the most persuasive and influential concept of a machine model of effective computability but who also anticipated in his work the diversity of topics brought together here. As Newman put it in his memoir of Turing, "The central problem with which he started and to which he constantly returned is the extent and the limitations of mechanistic explanations of nature." Turing's paper "On computable numbers, with an application to the Entscheidungs problem" appeared in print in 1937. It contained Turing's thesis that every 'effective' computation can be programmed on a Turing machine. Furthermore it contained the unsolvability of the halting problem and of the decision problem for first-order logic, and it presented the invention of the universal Turing machine. The publication of this idea is acknowledged as a landmark of the computer age. Part I of the volume explores the historical aspect with essays on the background, on Turing's work, and on subsequent developments. Part II contains an extensive series of essays on the influence and applications of these ideas in mathematics, mathematical logic, philosophy of mathematics, computer science, artificial intelligence, philosophy of language, philosophy of mind, and physics.

This volume commemorates the work of Alan Turing, because it was Turing who not only introduced the most persuasive and influential concept of a machine model of effective computability but who also anticipated in his work the diversity of topics brought together here. As Newman put it in his memoir of Turing, "The central problem with which he started and to which he constantly returned is the extent and the limitations of mechanistic explanations of nature." Turing's paper "On computable numbers, with an application to the Entscheidungs problem" appeared in print in 1937. It contained Turing's thesis that every 'effective' computation can be programmed on a Turing machine. Furthermore it contained the unsolvability of the halting problem and of the decision problem for first-order logic, and it presented the invention of the universal Turing machine. The publication of this idea is acknowledged as a landmark of the computer age. Part I of the volume explores the historical aspect with essays on the background, on Turing's work, and on subsequent developments. Part II contains an extensive series of essays on the influence and applications of these ideas in mathematics, mathematical logic, philosophy of mathematics, computer science, artificial intelligence, philosophy of language, philosophy of mind, and physics.

**82,54 €**

77,14 € (zzgl. MwSt.)

Lieferfrist: bis zu 10 Tage

Artikelnummer: 9780198537748
Medium: Buch
ISBN: 978-0-19-853774-8
Verlag: OXFORD UNIV PR
Erscheinungstermin: 15.08.1991
Sprache(n): Englisch
Auflage: 1. Auflage 1991
Produktform: Kartoniert
Gewicht: 992 g
Seiten: 676
Format (B x H): 155 x 236 mm

