Automata

Macmillan Computer Science Series

Consulting Editor: Professor J. S. Rohl, UMIST

A. Learner and A. J. Powell: *An Introduction to Algol 68 through Problems*

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Automata

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First published 1976 by
THE MACMILLAN PRESS LTD
London and Basingstoke
Associated companies in New York Dublin
Melbourne Johannesburg and Madras

ISBN 978-0-333-21217-2 ISBN 978-1-349-15691-7 (eBook)
DOI 10.1007/978-1-349-15691-7

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Preface

This book has grown out of a course of lectures given to undergraduates reading mathematics with computer science; however, no specific mathematical background is assumed, and we hope that the result will be of interest not only to mathematicians and computer scientists, but also to those, such as linguists and brain theorists, whose subject has been influenced by the development of automata theory.

Our main object is to clarify what is meant by the claim that a function may be computed, or that a question may be decided, by an effective procedure. Answers to questions like these may be phrased either in terms of logic or in terms of some particular machine that carries out the procedure. In order to present a self-contained treatment, we include as appendix A a brief survey of the logic underlying the theory of computability.

We should like to express our thanks to J. S. Rohl, Jane Hughes and Derek Coleman, for their many useful comments and suggestions, and to Susan Heywood, whose help has been invaluable in translating our ideas into typescript.

Salford, 1976

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