NEW BOOKS


This book is the scientific will and testament of Christopher Strachey whose premature death was felt as a major loss by the whole computing community. One should be very grateful to Robert Milne, coauthor of the book, to have assumed the major task of bringing the initial draft to completion. The book as it stands may be the most developed attempt to formalize the description of programming languages, as independently as possible from the specific features of each of them.


Chapter five: Stack semantics. Idealized version of realistic implementation. Preparation for inductive proof. The congruence between store semantics and stack semantics. Compilers. The identity between stack semantics and consecution semantics. The conformity between consecution semantics and pointer semantics.


This is a textbook for undergraduate or first year graduate students in computer science who desire a self contained introduction to the theory of computation. The author is teaching at the University of Reading (UK).

1. Programs and machines. 2. The equivalence of programs. 3. Algorithms and universal machines. 4. Unsolvability decision problems. 5. The correctness of programs. 6. The definition of functions by recursion. 7. The fixed point theory of recursion. 8. Application of the fixed point theory.


Proceedings of a Seminar organized by UAM-IBM Scientific Center, Madrid, April 1975. R. Aguilar is director of the IBM Scientific Center attached to the Universidad Autonoma de Madrid.


One can subscribe to Astérisque or order a single issue from Offilib, 48 rue Gay-Lussac, 75005, Paris, France.