

Lecture Notes in Computer Science

Edited by G. Goos and J. Hartmanis

134

Program Specification

Proceedings of a Workshop
Aarhus, Denmark, August 1981

Edited by J. Staunstrup



Fachbereich Mathematik
Technische Hochschule Darmstadt
Bibliothek
Inv.-Nr. B 14231

Springer-Verlag
Berlin Heidelberg New York 1982

TABLE OF CONTENTS

<u>Chapter 1</u>		
- Introduction, J. Staunstrup		1
- Issues and Observations, J.J. Horning		5
 <u>Chapter 2</u>		
Example 1: Geometrical Constructions		25
- J. Staunstrup		26
- J. Goguen		31
 <u>Chapter 3</u>		
Example 2: KWIC-index generation		47
- J. Steensgaard-Madsen		48
- J.W. Hughes and M.S. Powell		63
- H. Ehrig and H.-J. Kreowski		78
- L. Sandegaard Nielsen		84
- J.R. Abrial and I.H. Sørensen		88
- R.M. Gallimore and D. Coleman		96
- J. Goguen		114
 <u>Chapter 4</u>		
Example 3: Communication Network		118
- L. Sandegaard Nielsen		119
- I.H. Sørensen		123
 <u>Chapter 5</u>		
Submitted papers		137
- Partial Correctness of Distributed Programs		138
D. Coleman and R.M. Gallimore		
- Specification of Distributed Programs		181
D.Coleman and R.M. Gallimore		
- Robust Data Types		215
F. Cristian		
- A Reduction Specification for DTL		255
J.W. Hughes and M.S. Powell		
- Recursive Definitions of Operations in Universal		268
H.A. Klæren	Algebras	
- The SRDL Specification Experiment		282
H.A. Klæren		
- Program Specification by Module Trees		294
J.S. Madsen		

- Parameter Passing in Algebraic Specification Languages	... 322
H. Ehrig, H.-J. Kreowski, J. Thatcher, E. Wagner and J. Wright	
- A few Remarks on Putting Formal Specifications to Productive Use	.. 370
J.V. Guttag	
- A Specification Language 381
I.H. Sørensen	
- Tecton: A Language for Manipulating Generic Objects 402
D. Kapur, D.R. Musser, and A.A. Stepanov	
-Concurrency 415
L. Sandegaard Nielsen	
List of Material Distributed During the Workshop 423
List of Non-Local Participants 425