S. Balemi

P. Kozák

R. Smedinga

**Editors** 

## Discrete Event Systems: Modeling and Control

Proceedings of a Joint Workshop held in Prague, August 1992

## Contents

Preface VII
Logical Models
Augmented Language and Supervisory Control in Discrete Event Systems $T.\ Ushio \dots 3$
Input/Output Discrete Event Processes and System Modeling S. Balemi
Supervisory Control and Formal Methods for Distributed Systems  K. İnan
An Overview of Results in Discrete Event Systems Using a Trace Theory Based Setting R. Smedinga
A Minimally Restrictive Policy for Deadlock Avoidance in a Class of FMS Y. Brave and D. Bonvin
Similarity of Events in Discrete Event Systems  J. Pik
Control of Discrete Event Systems by means of the Boolean Differential Calculus R. Scheuring and H. Wehlan
A Unifying Framework for Discrete Event System Control Theory P. Kozák95
Optimisation
On a Generalized Asymptoticity Problem in Max Algebra J. G. Braker and J. A. C. Resing
Conditions for Tracking Timing Perturbations in Timed Petri Nets with Monitors K. J. Williams, J. A. Gannon, M. S. Andersland, J. E. Lumpp, and T. L. Casavant

Extensions to the Theory of Optimal Control of Discrete Event Systems  R. Sengupta and S. Lafortune
The Workshop Exercise
The Workshop Exercise: An Introduction
The Workshop Exercise Using a Trace Theory Based Setting  R. Smedinga
A Petri Nets-Based Approach to the Maze Problem Solving $F.\ \check{C}apkovi\check{c}$
The Cat-and-Mouse Problem as a System of Boolean Equations $O.~K\~r\'i\~z$
Symbolic Supervisory Synthesis for the Workshop Exercise  G.J. Hoffmann and H. Wong-Toi
The Cat-and-Mouse Problem with Least Delays $P. \ \textit{Koz\'{a}k}. \hspace{1.5cm} $
Supervisory Control with Variable Lookahead Policies: Illustrative Example S. L. Chung, S. Lafortune and F. Lin
Selected Bibliography