

Janette Cardoso
Heloisa Camargo (Eds.)

Fuzziness in Petri Nets

With 141 Figures
and 16 Tables

Physica-Verlag
A Springer-Verlag Company

Contents

<i>Preface</i>	v
J. Cardoso and H. Camargo	
 1. INTRODUCTORY SECTIONS	
 <i>An Introduction to Petri Net Theory</i>	 3
R. Valette, B. Pradin-Chézalviel and F. Girault	
 <i>A Brief Introduction to Fuzzy Sets and Fuzzy Systems</i>	 25
M. Fedrizzi and J. Kacprzyk	
 <i>A Brief Introduction to Possibility Theory and Its Use for Processing Fuzzy Temporal Information</i>	 52
D. Dubois and H. Prade	
 2. FUZZINESS IN PETRI NETS: VARIOUS ASPECTS	
 <i>Fuzzy Petri Nets for Rule-Based Decisionmaking</i>	 75
C.G. Looney	

<i>Fuzzy-Timing High-Level Petri Nets for Time-Critical Systems</i> T. Murata, T. Suzuki and S.M. Shatz	88
<i>Time Fuzzy Petri Nets</i> J. Cardoso	115
<i>Temporal Reasoning in Fuzzy Time Petri Nets</i> L. A. Künzle, R. Valette and B. Pradin-Chèzalviel	146
<i>Reasoning with Fuzzy Temporal Rules on Petri Nets</i> A. Bugarin, P. Cariñena, P. Félix and S. Barro	174
<i>Knowledge Base Verification Using Fuzzy Petri Nets</i> S.-M. Chen	202
<i>Fuzzy Modelling for Reactive Real-Time Systems Control Using Reactive Petri Nets</i> L. Gomes	223
<i>The Design of Knowledge Bases through Hierarchical Fuzzy Petri Nets</i> H. Camargo	255
<i>Learning in Fuzzy Petri Nets: Concepts and Calibration Methodology</i> W. Pedrycz and J.F. Peters	276
<i>Fuzzy Petri Nets for Knowledge Modelling in Expert Systems</i> A. Fay and E. Schnieder	300