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Theory and Application of Graph Transformations

6th International Workshop, TAGT'98
Paderborn, Germany, November 16-20, 1998
Selected Papers



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Gerhard Goos, Karlsruhe University, Germany
Juris Hartmanis, Cornell University, NY, USA
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Volume Editors

Hartmut Ehrig
Technical University of Berlin, Sekr. FR 6 - 1, Computer Science Department (FB13)
Franklinstr. 28/29, 10587 Berlin, Germany
E-mail: ehrig@cs.tu-berlin.de

Gregor Engels
University of Paderborn, Department of Computer Science
Warburger Str. 100, 33098 Paderborn, Germany
E-mail: engels@upb.de

Hans-Jörg Kreowski
University of Bremen, Department of Computer Science, P. O. 330440
28334 Bremen, Germany
E-mail: kreo@informatik.unibremen.de

Grzegorz Rozenberg
Leiden University
Leiden Institute of Advanced Computer Science (LIACS)
Niels-Bohr-Weg 1, 2333 CA Leiden, The Netherlands
E-mail: rozenberg@wi.leidenuniv.nl

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Preface

The area of graph transformation originated in the late 1960s under the name “graph grammars” – the main motivation came from practical considerations concerning pattern recognition and compiler construction. Since then, the list of areas which have interacted with the development of graph transformation has grown impressively. The areas include: software specification and development, VLSI layout schemes, database design, modeling of concurrent systems, massively parallel computer architectures, logic programming, computer animation, developmental biology, music composition, distributed systems, specification languages, software and web engineering, and visual languages.

As a matter of fact, graph transformation is now accepted as a fundamental computation paradigm where computation includes specification, programming, and implementation. Over the last three decades the area of graph transformation has developed at a steady pace into a theoretically attractive research field, important for applications.

This volume consists of papers selected from contributions to the Sixth International Workshop on Theory and Applications of Graph Transformation that took place in Paderborn, Germany, November 16-20, 1998. The papers underwent an additional refereeing process which yielded 33 papers presented here (out of 55 papers presented at the workshop). This collection of papers provides a very broad snapshot of the state of the art of the whole field today. They are grouped into nine sections representing most active research areas.

The workshop was the sixth in a series of international workshops which take place every four years. Previous workshops were called “Graph Grammars and Their Application to Computer Science”. The new name of the Sixth Workshop reflects more accurately the current situation, where both theory and application play an equally central role.

The workshop has received financial support from the European Community as a TMR Euroconference, as well as through the TMR network GETGRATS and the ESPRIT Working Group APPLIGRAPH.

November 1999

H. Ehrig, G. Engels,
H.-J. Kreowski, G. Rozenberg

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G. Costagliola	D. Janssens	G. Taentzer
F. Drewes	B. Hoffmann	N. Verlinden
J. Engelfriet	M. Koch	J. Wadsack
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M. Gajewsky	U. Nickel	A. Zündorf
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St. Gruner	D. Plump	

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