

# Lecture Notes in Computer Science

1906

Edited by G. Goos, J. Hartmanis and J. van Leeuwen

**Springer**

*Berlin*

*Heidelberg*

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António Porto Gruia-Catalin Roman (Eds.)

# Coordination Languages and Models

4th International Conference, COORDINATION 2000  
Limassol, Cyprus, September 11-13, 2000  
Proceedings



Springer

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## Cataloging-in-Publication Data applied for

### Die Deutsche Bibliothek - CIP-Einheitsaufnahme

Coordination languages and models : 4th international conference,  
coordination 2000, Limassol, Cyprus, September 11 - 13, 2000 ;  
proceedings / António Porto ; Gruia-Catalin Roman (ed.). - Berlin ;  
Heidelberg ; New York ; Barcelona ; Hong Kong ; London ; Milan ;  
Paris ; Singapore ; Tokyo : Springer, 2000  
(Lecture notes in computer science ; Vol. 1906)  
ISBN 3-540-41020-1

CR Subject Classification (1998): D.1.3, C.2.4, F.1.2, D.2.4, I.2.11

ISSN 0302-9743

ISBN 3-540-41020-1 Springer-Verlag Berlin Heidelberg New York

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Springer-Verlag Berlin Heidelberg New York  
a member of BertelsmannSpringer Science+Business Media GmbH  
© Springer-Verlag Berlin Heidelberg 2000  
Printed in Germany

Typesetting: Camera-ready by author, data conversion by Steingraber Satztechnik GmbH, Heidelberg  
Printed on acid-free paper SPIN: 10722670 06/3142 5 4 3 2 1 0

# Preface

This volume contains the *Proceedings of the Fourth International Conference on Coordination Models and Languages, Coordination 2000*. It was held in the wake of three successful earlier conferences whose proceedings were also published in this series, in volumes 1061, 1282 and 1594. The need for increased programmer productivity and rapid development of complex systems provides pragmatic motivation for the development of coordination languages and models. The intellectual excitement associated with such endeavors is rooted in the decades-old desire to cope with increasingly higher levels of abstraction. Coordination-based methods provide a clean separation between individual software components and their interactions within the overall software organization. This separation promises to make application development more tractable, to support global analysis, and to enhance software reuse. These are indeed major concerns in the information age, at a time when all aspects of society are relying, to an ever increasing degree, on software systems of unprecedented complexity. Research on coordination methods is likely to play a central role in addressing these technological concerns by changing the software culture around us and by leading to the development of effective technical solutions for a broad range of important problems.

Following a tradition of careful selection of high-quality contributions, 18 regular papers were chosen out of 52 submissions. Another nine were selected for presentation as short papers. The papers included in this volume reflect some of the new directions coordination research is pursuing (e.g., mobility, coordination styles, open systems, etc.) as well as continued study of established problem areas (e.g., semantic models, software architecture, dependability, etc.). The volume exhibits intellectual breadth, a great deal of diversity in views and pursuits, but also a surprising degree of cohesion. This enabled us to group papers by subject matter into sessions that are reflected in the organization of this volume. It is our hope that these papers will become a useful reference for many researchers worldwide and will stimulate further advances in coordination-centered technologies, methods, and formal studies.

The conference and this volume would not have been possible without the intellectual contributions of all the authors, the advice and careful reviews by members of the program committee, and the additional referees who helped us complete the paper evaluations. Special thanks go to Amy L. Murphy for helping with the administration of the submission and review process and to George Papadopoulos for chairing the local organization in Cyprus. Finally, we acknowledge the support from the University of Cyprus and the sponsorship and support from the Esprit Working Group 24512 “Coordina”.

July 2000

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