

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

António Porto
Gruia-Catalin Roman

Steering Committee

Paolo Ciancarini	U. Bologna, Italy
Roberto Gorrieri	U. Bologna, Italy
Chris Hankin	Imperial College, London, UK
Daniel Le Métayer	IRISA/INRIA, Rennes, France
António Porto	New U. Lisbon, Portugal
Robert Tolksdorf	T.U. Berlin, Germany

Program Committee

Co-chairs	António Porto	New U. of Lisbon, Portugal
	Gruia-Catalin Roman	Washington U. in St. Louis, USA
Members	Gul Agha	U. Illinois, Urbana-Champaign, USA
	Farhad Arbab	CWI, Amsterdam, The Netherlands
	Lubomir Bic	U. California, Irvine, USA
	GianLuigi Ferrari	U. Pisa, Italy
	Jose Luiz Fiadeiro	U. Lisbon, Portugal
	Roberto Gorrieri	U. Bologna, Italy
	Paola Inverardi	U. l'Aquila, Italy
	Jean-Marie Jacquet	U. Namur, Belgium
	Edwin de Jong	Silicon Graphics, De Meern, The Netherlands
	Joost Kok	U. Leiden, The Netherlands
	Jose Meseguer	SRI, Menlo Park, USA
	Naftaly Minsky	Rutgers U., Piscataway, NJ, USA
	Antonio Natali	U. Bologna, Italy
	Rocco De Nicola	U. Firenze, Italy
	George Papadopoulos	U. Cyprus, Cyprus
	Rick Schlichting	U. Arizona, USA
	Katia Sycara	Carnegie Mellon U., Pittsburg, USA
	John Thomas	IBM Almaden, USA
	Robert Tolksdorf	T.U. Berlin, Germany
	Alan Wood	U. York, UK
	Daniel Yankelevich	Pragma Consultores, Buenos Aires, Argentina

Organizing Chair

George Papadopoulos U. Cyprus, Cyprus

Additional Reviewers

Lorenzo Bettini	Maurizio Gabrielli	Henry Muccini	Davide Rossi
Monica Bobrowski	Mauro Gaspari	Amy Murphy	Laura Semini
Victor Braberman	Dan Hirsch	Enrico Nardelli	Sebastian Uchitel
Nadia Busi	Michele Loreti	Alfredo Olivero	Betti Venneri
Enrico Denti	Chiara Meo	Rosario Pugliese	Gianluigi Zavattaro
Miguel Felder	Michela Milano		