

Foreword

This volume contains the papers that were presented at the Eighth Latin American Workshop on Logic / Languages, Algorithms and New Methods of Reasoning 2012 (LANMR 2012). We include general topics related to Computer Sciences, we use the LA part of LANMR to stand both for Languages/Logic + Algorithms, as well as for "Latin America". LANMR 2012 was held in the Universidad Autónoma Metropolitana, Unidad Iztapalapa, Mexico, D.F. on September 10-11, 2012.

The Eighth edition of the workshop was organized by the Benemérita Universidad Autónoma de Puebla, the Universidad de las Américas-Puebla, and the Universidad Autónoma Metropolitana, Unidad Iztapalapa.

The aim of the workshop was to bring together active researchers in formal areas of Computer Science (CS) such as Logic, Formal languages, Algorithms, and Non-Monotonic Reasoning. Particular topics of interest were knowledge representation, belief revision, reasoning about actions, planning, logic programming, causality, and other related topics.

In Latin America there are several research groups interested in these areas. The number of papers and workshops submitted to different congresses related to Computer Sciences such as IBERAMIA, ENC and MICAI provides evidence of such interest. So, LANMR workshop is designed to promote cooperation among practitioners and researchers across disciplines who are interested in the formal areas of Computer Sciences. The aims of the workshop were:

- to present innovative theoretical work and original applications of the formal areas of Computer Sciences,
- to exchange ideas and to facilitate interaction between researchers of the formal areas of Computer Sciences,
- to discuss significant recent achievements in the theory and automation based on the formal areas of Computer Sciences,
- to present critical short and long term goals for the formal areas of Computer Sciences,
- to provide a forum for students to present their current research in the formal areas of Computer Sciences, and receive feedback from other students and researchers.

We would like to thank all authors who submitted papers as well as all the referees for their expertise and time they put into carefully reviewing the papers.

This year the invited speakers Stefania Costantini, Professor of Computer Science, Department of the University of L'Aquila, Italy; and Juan Carlos Nieves Sánchez, Professor of Computer Science, Department of the Umea University, Sweden.

Both of them provided means to explore ways in which their research may contribute to the identification and addressing of problems of common interest in the formal areas of Computer Sciences. We are grateful to Prof. Stefania Costantini's and Prof. Juan Carlos Nieves for preparing such interesting invited papers and talks and for taking the time and effort to attend the workshop. We also thank the "Cuerpo Académico de Computo Distribuido de la Facultad de Ciencias de la Computación" from the Benemérita Universidad Autónoma de Puebla, the "Cuerpo Académico de Redes y Servicios de Telecomunicaciones" and the "Cuerpo Académico de Sistemas de Comunicación Digital" from the Universidad Autónoma Metropolitana, Unidad Iztapalapa, for their support. We greatly appreciate the Local Committee and staff of the Facultad de Ingeniería, División de Computación de Ciencias Básica e Ingeniería of the Universidad Autónoma Metropolitana, Unidad Iztapalapa for hosting and supporting the Workshop.

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