

## Preface

This volume contains the papers that were presented at the Tenth Latin American Workshop on Logic/Languages, Algorithms and New Methods of Reasoning 2016 (LANMR 2016). 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 2016 was held in the Benemérita Universidad Autónoma de Puebla, Puebla, México, on August 15th, 2016.

The Tenth edition of the workshop was organized by the Benemérita Universidad Autónoma de Puebla, the Universidad de las Américas-Puebla, and the Universidad Autónoma del Estado de México.

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. 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 MICAÍ 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 speaker was Ruy de Queiroz, Professor of Computer Science, Centro de Informática, Universidade Federal de Pernambuco, Brazil. He provided means to explore ways in which his 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. Ruy for preparing such interesting invited paper and talk and for taking the time and effort to attend the workshop.

We also thank the "Cuerpo Académico de Cómputo Distribuido de la Facultad de Ciencias de la Computación" from the Benemérita Universidad Autónoma de Puebla, and the "Cuerpo Académico de Sistemas Computacionales" from the Universidad Autónoma del Estado de México for their support. We greatly appreciate the Local Committee and staff of the Facultad de Ciencias de la Computación, of the Benemérita Universidad Autónoma de Puebla for hosting and supporting the Workshop.

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