Preface

This volume contains the papers presented at the Twelfth Latin American Workshop on Logic/Languages, Algorithms and New Methods of Reasoning 2019 (LANMR 2019). We include general topics related to Computer Sciences, LA part of LANMR stands both for "Languages/Logic + Algorithms", as well as for "Latin America". LANMR 2019 was held at Universidad Popular Autónoma del Estado de Puebla, Mexico, on November 15th, 2019.

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

The workshop aimed to bring together active researchers in formal areas of Computer Science 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 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 want to thank all authors who submitted papers as well as all the referees for their expertise and the time they put into carefully reviewing the papers. This year the invited speaker was Adolfo García de la Sienra, Professor of the Universidad Veracruzana. He has provided the talk Non-standard Utility Functions.

We also thank the Universidad Popular Autónoma del Estado de Puebla, Benemérita Universidad Autónoma de Puebla, and Universidad Autónoma del Estado de México for their support. We much appreciate the Local Committee and staff for hosting and supporting the Workshop. We are also grateful to the EasyChair team for their support.

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