

9th Symposium on Languages, Applications and Technologies

**SLATE 2020, July 13–14, 2020, School of Technology,
Polytechnic Institute of Cávado and Ave, Portugal
(Virtual Conference)**

Edited by

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Preface

This book compiles the seventeen papers accepted for the ninth edition of the Symposium on Languages, Applications and Technologies, SLATE 2020, published in the OASIcs – the OpenAccess Series in Informatics.

The symposium discusses languages as the base of communication at three different levels. Firstly, it covers all aspects regarding the communication between humans using natural language, and how to process it. Secondly, it reserves a discussion space for the processing of languages used in the communication of humans with computers. In this realm, works often lean over language design, processing, assessment, and applications. Finally, with the advent of networks and IoT, the symposium also tackles works related to the communication between computers emphasizing the design of domain-specific languages, its serialization, communication, and orchestration.

In this quite strange year it was not easy to have SLATE running. We had a first attempt to organize in the south of Portugal but for different reasons that was not possible. After preparing the organization in the north of Portugal, in Barcelos, we had the COVID-19 epidemic, making it hard for conferences to survive, especially when even large conferences are getting canceled.

With all these issues, we are happy to have a nice selection of papers, and be able to have the conference taking place almost at the usual dates, with a similar number of accepted papers from previous years.

We believe that this selection of papers can contribute for the progress of the research on languages processing covering the different problems that arise when dealing with programming languages, annotations languages and natural languages.

We want to thank the many people without whom this event would never have been possible: all the Members of the Scientific Program Committee for their valuable effort reviewing the submissions, contributing with corrections and new ideas, and helping on deciding the final list of accepted paper; the members of the Organizing Committee, for the help on dealing with the bureaucratic issues; the invited Speakers (*Jang F.M. Graat* and *Samuel Ferreira*) for accepting our invitation to share their knowledge; and finally, thank you all the Authors for their contributions to SLATE with their current projects and research problems.

Alberto Simões, Pedro Rangel Henriques, and Ricardo Queirós



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