

# 2<sup>nd</sup> Symposium on Languages, Applications and Technologies

SLATE'13, June 20-21, 2013, Porto, Portugal

Edited by

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## ■ Preface

The success of the humankind relies on our ability to communicate and transform the world. For ages we developed tools and technologies that allowed us to thrive and prosper. As we expanded to every corner of the planet we created languages that enabled us to communicate and record knowledge, even if they also become barriers to communication in themselves.

Technology and language have always been interconnected. Technologies to record language gave birth to history and the written language allowed us to preserve knowledge, including knowledge on technologies. Technology reshaped language as books, radio shows or motion pictures made us aware of how other people communicate. But technologies and language were not completely blend together until computers and networks become our favourite tool to communicate and transform the world.

The goal of the Symposium on Languages, Applications and Technologies (SLATE) is to be a forum to discuss the different ways in which language and technology interplay in computer science, and they are many. The symposium is divided into three main tracks, each one focusing a specific aspect of languages, from natural languages to compilers.

- The HHL (Human-Human Languages) track is dedicated to the discussion of research projects and ideas involving natural language processing and their industrial application.
- The HCL (Human-Computer Languages) track is where researchers, developers and educators exchange ideas and information on the latest academic or industrial work on language design, processing, assessment and applications.
- The CCL (Computer-Computer Languages) track main goal is to provide a broad space for discussion about the XML markup language, examples of usage and associated technologies.

SLATE follows the footsteps of two former conferences: CoRTA, the Conference on Compilers, Related Technologies and Applications; and XATA, the conference on XML, Applications and Applied Technologies, both with more than a decade of history.

This volume contains the proceedings of the 2nd edition of SLATE, held in the Department of Computer Science, Faculty of Sciences, University of Porto, Portugal, during June 20-21, 2013.

This year, SLATE received a total of 26 paper submissions for the three tracks. Each submission was reviewed by at least three Program Committee members, which included 55 researchers (counting sub-reviewers). At the end, 19 papers were selected for publication and presentation at the symposium, resulting in a 27% rejection rate. The set of accepted papers present a variety of contributions and were divided into the following five sessions for presentation at the symposium:

**Software Development Tools**, includes four articles on programming languages compilation and analysis;

**XML and Applications**, includes four articles on the usage of XML in different areas, ranging from the annotation of documents to its use on the semantic web;

**Languages on Learning Environments**, includes three articles that focus the automation on exercises generation and evaluation;

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**Domain Specific Languages**, includes four articles on languages for specific languages, from music, robots or graphical user interfaces;

**Natural Language Processing**, includes four articles related to processing and teaching natural languages.

In addition to these sessions, the program also included two keynote presentations, one on the PICAT system, a scalable logic-based language, by Neng-Fa Zhou (Brooklyn College, New York), and another on software languages and their history, by Jean-Marie Favre (University of Grenoble, France).

The organizers of SLATE 2013 are in debt to many people without whom this event would never been possible. We wish to thank to our sponsors for making this event possible and to the EasyChair conference management system for simplifying our task. Thanks must go also to the authors of all submitted papers for their contribution and interest in the symposium and to the participants for making the event a meeting point for a fruitful exchange of ideas and feedback on recent developments. Finally, we want to express our gratitude to the Program Committee members and sub-reviewers, as the symposium would not have been possible without their dedicated time and knowledge in evaluating and ranking so many submissions from so many different topics.

To all, our deepest thanks!

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