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# Natural Language Processing and Information Systems

23rd International Conference on Applications of Natural Language to Information Systems, NLDB 2018 Paris, France, June 13–15, 2018 Proceedings



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#### **Preface**

This volume of *Lecture Notes in Computer Science* (LNCS) contains the papers selected for presentation at the 23rd International Conference on Natural Language and Information Systems, held in Paris, France (CNAM), during June 13–15, 2018 (NLDB2018).

Since its foundation in 1995, the NLDB conference has brought together researchers, industry practitioners, and potential users interested in various application of natural language in the database and information systems field. The term "information systems" has to be considered in the broader sense of information and communication systems, including big data, linked data, and social networks. The field of natural language processing (NLP) has itself recently experienced several exciting developments. In research, these developments have been reflected in the emergence of neural language models (Deep Learning, Word2Vec) and a (renewed) interest in various linguistic phenomena, such as in discourse and argumentation theory (argumentation mining). Regarding applications, NLP systems have evolved to the point that they now offer real-life, tangible benefits to enterprises. Many of these NLP systems are now considered de facto offerings in business intelligence suites, such as algorithms for recommender systems and opinion mining/sentiment analysis as well as question-answering systems.

It is against this backdrop of recent innovations in NLP and its applications in information systems that the 23rd edition of the NLDB conference, NLDB 2018, took place. We have welcomed research and industrial contributions, describing novel, previously unpublished works on NLP and its applications across a plethora of topics. Indeed, this year NLDB had 99 submissions from which we selected 18 long papers (18% acceptance rate), 26 short papers, and nine posters, and each paper was reviewed by an average of three reviewers. The conference and Program Committee co-chairs had a final consultation meeting to look at all the reviews and make the final decisions.

This year, we had the opportunity to welcome two invited presentations from:

- Prof. Jean-Gabriel Ganascia (LIP6 Laboratory, Institut Universitaire de France)
- Dr. Serge Rosmorduc (Cedric Laboratory, Conservatoire National des Arts et Métiers, France)

We would like to thank all who submitted papers for reviews and for publication in the proceedings and all the reviewers for their time, effort, and for completing their assignments on time.

April 2018

Max Silberztein Faten Atigui Elena Kornyshova Elisabeth Métais Farid Meziane

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