

**INTERNATIONAL CONFERENCE  
RECENT ADVANCES  
IN NATURAL LANGUAGE PROCESSING**

**RANLP 2019**

**Natural Language Processing  
in a Deep Learning World**

**PROCEEDINGS**

Edited by Galia Angelova, Ruslan Mitkov, Ivelina Nikolova, Irina Temnikova

Varna, Bulgaria  
2–4 September, 2019

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## Preface

Welcome to the 12th International Conference on “Recent Advances in Natural Language Processing” (RANLP 2019) in Varna, Bulgaria, 2-4 September 2019. The main objective of the conference is to give researchers the opportunity to present new results in Natural Language Processing (NLP) based on modern theories and methodologies.

The Conference is preceded by the First Summer school on Deep Learning in NLP (29-30 August 2019) and two days of tutorials (31 August – 1 September 2019).

The Summer School lectures are given by Kyunghyun Cho (New York University), Marek Rei (University of Cambridge), Tim Rocktäschel (University College London) and Hinrich Schütze (Ludwig Maximilian University, Munich). Training in practical sessions is provided by Heike Adel (Stuttgart University), Alexander Popov (Institute of Information and Communication Technologies, Bulgarian Academy of Sciences), Omid Rohanian and Shiva Taslimipour (University of Wolverhampton).

Tutorials are given by the following lecturers: Antonio Miceli Barone (University of Edinburgh) and Sheila Castilho (Dublin City University), Valia Kordoni (Humboldt University, Berlin), Preslav Nakov (Qatar Computing Research Institute, HBKU), Vlad Niculae and Tsvetomila Mihaylova (Institute of Telecommunications, Lisbon).

The conference keynote speakers are:

- Kyunghyun Cho (New York University),
- Ken Church (Baidu),
- Preslav Nakov (Qatar Computing Research Institute, HBKU),
- Sebastian Padó (Stuttgart University),
- Hinrich Schütze (Ludwig Maximilian University, Munich).

This year 18 regular papers, 37 short papers, 95 posters, and 7 demos have been accepted for presentation at the conference. The selection rate of accepted papers is: regular papers 8,7%, short papers 26,7%, posters and demo papers – 72%.

The proceedings cover a wide variety of NLP topics, including but not limited to: deep learning; machine translation; opinion mining and sentiment analysis; semantics and discourse; named entity recognition; coreference resolution; corpus annotation; parsing and morphology; text summarisation and simplification; event extraction; fact checking and rumour analysis; NLP for healthcare; and NLP for social media.

In 2019 RANLP hosts four post-conference workshops on influential NLP topics: the 2nd Workshop on Human-Informed Translation and Interpreting Technology (HiT-IT 2019), the

12th Workshop on Building and Using Comparable Corpora (BUCC), the Multiling 2019 Workshop: Summarization Across Languages, Genres and Sources as well as an Workshop on Language Technology for Digital Historical Archives with a Special Focus on Central-, (South-)Eastern Europe, Middle East and North Africa. The International Conference Biographical Data in a Digital World 2019 is another event held on 5-6 September 2019 in parallel with the RANLP post-conference Workshops.

We would like to thank all members of the Programme Committee and all additional reviewers. Together they have ensured that the best papers were included in the Proceedings and have provided invaluable comments for the authors.

Finally, special thanks go to the University of Wolverhampton, the Institute of Information and Communication Technologies at the Bulgarian Academy of Sciences, the Bulgarian National Science Fund, Ontotext and IRIS.AI for their generous support of RANLP.

Welcome to Varna and we hope that you enjoy the conference!

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