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Preface

Welcome to the proceedings of NLPCC 2019, the 8th CCF International Conference on Natural Language Processing and Chinese Computing. Following the success of previous iterations of the conference held in Beijing (2012), Chongqing (2013), Shenzhen (2014), Nanchang (2015), Kunming (2016), Dalian (2017), and Hohhot (2018), this year's NLPCC was held at Dunhuang, an oasis on China's ancient Silk Road. It is situated in the northwest region of China, where the Gobi Desert and the far eastern edge of the Taklamakan Desert meet in the Gansu Province. As a leading international conference on natural language processing and Chinese computing, organized by the CCF-TCCI (Technical Committee of Chinese Information, China Computer Federation), NLPCC 2019 serves as an important forum for researchers and practitioners from academia, industry, and government to share their ideas, research results and experiences, and to promote their research and technical innovations in the fields.

The fields of natural language processing (NLP) and Chinese computing (CC) have boomed in recent years, and the growing number of submissions to NLPCC is testament to this trend. After unfortunately having to reject over 50 submissions that did not meet the submission guidelines, we received a total of 492 valid submissions to the entire conference, inclusive of the main conference, Student Workshop, Evaluation Workshop and the special Explainable AI (XAI) Workshop. This represents a record 76% increase in the number of submissions compared with NLPCC 2018. Of the 451 valid submissions to the main conference, 343 were written in English and 108 were written in Chinese. Following NLPCC's tradition, we welcomed submissions in eight areas for the main conference: NLP Fundamentals, NLP Applications, Text Mining, Machine Translation, Machine Learning for NLP, Information Extraction/Knowledge Graph, Conversational Bot/Question Answering/Information Retrieval, and NLP for Social Networks. This year, we also adapted the call for papers to especially allow for papers addressing privacy and ethics as well, as this has become a key area of interest as NLP and CC deployments grow in industry. We adopted last year's innovation by inviting authors to submit their work to one of five categories, each which had a different review form.

Acceptance decisions were made during a hybrid virtual and physical scientific Program Committee (PC) meeting attended by the general, PC, and area chairs. After our deliberations for the main conference, 92 submissions were accepted as full papers (with 77 papers in English and 15 papers in Chinese) and 38 as short papers. Eight papers were nominated by the area chairs for the best paper award in both the English and Chinese tracks. An independent best paper award committee was formed to select the best paper from the shortlist. The proceedings include only the accepted English papers; the Chinese papers appear in *ACTA Scientiarum Naturalium Universitatis Pekinensis*. In addition to the main proceedings, four papers were accepted for the

student workshop, 14 papers were accepted for the Evaluation Workshop, and nine papers were accepted to the special Explainable AI (XAI) Workshop.

We were honored to have four internationally renowned keynote speakers—Keh-Yih Su, Mark Liberman, Dawei Song, and Fei Xia—share their expert opinions on recent developments in NLP via their lectures “On Integrating Domain Knowledge into DNN,” “Clinical Applications of Human Language Technology,” “A Quantum Cognitive Perspective for Information Access and Retrieval,” and “NLP Is Not Equal to NN.”

The organization of NLPCC 2019 took place with the help of a great many people:

- We are grateful to the guidance and advice provided by General Co-chairs Kenneth Church and Qun Liu, and Organization Committee Co-chairs Dongyan Zhao, Hongzhi Yu, and Zhijun Sun. We especially thank Dongyan Zhao, as the central committee member who acted as a central adviser to both of us as PC chairs, in making sure all of the decisions were made on schedule.
- We would like to thank Student Workshop Co-chairs Yue Zhang and Jiajun Zhang, as well as Evaluation Co-chairs Weiwei Sun and Nan Duan, who undertook the difficult task of selecting the slate of accepted papers from the large pool of high-quality papers.
- We are indebted to the 17 area chairs and the 287 primary reviewers, for both the English and Chinese tracks. This year, with a record number of submissions, they operated under severe load, and completed their careful reviews, still under a month. We could not have met the various deadlines during the review process without their hard work.
- We thank ADL/Tutorial Co-chairs Xiaojun Wan, Qi Zhang, and Hua Wu for assembling a comprehensive tutorial program consisting of six tutorials covering a wide range of cutting-edge topics in NLP.
- We thank Sponsorship Co-chairs Ming Zhou and Tiejun Zhao for securing sponsorship for the conference.
- We also thank Publication Co-chairs Sujian Li and Hongying Zan for ensuring every little detail in the publication process was properly taken care of. Those who have done this form of service work know how excruciating it can be. On behalf of us and all of the authors, we thank them for their work, as they truly deserve a big applause.
- Above all, we thank everybody who chose to submit their work to NLPCC 2019. Without your support, we could not have put together a strong conference program.

September 2019

Jie Tang
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NLPCC 2019 was organized by China Computer Federation, and hosted by Northwest Minzu University, Dunhuang Academy and the National State Key Lab of Digital Publishing Technology.

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