

**Yi Chang  
Xiaofei Zhu (Eds.)**

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# **Information Retrieval**

**28th China Conference, CCIR 2022  
Chongqing, China, September 16–18, 2022  
Revised Selected Papers**

 **Springer**

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# Information Retrieval

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*Editors*

Yi Chang  
Dingxin Building C403  
Jilin University  
Changchun, China

Xiaofei Zhu  
College of Computer Science  
and Engineering  
Chongqing University of Technology  
Chongqing, China

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# Preface

The 2022 China Conference on Information Retrieval (CCIR 2022), sponsored by the Chinese Information Processing Society of China (CIPS), organized by the Information Retrieval Committee of the Chinese Information Processing Society of China (CIPS) and Chongqing University of Technology, co-organized by Chongqing Artificial Intelligence Association, was the 28th installment of the conference series. The conference was held in Chongqing on September 16–18, 2022.

Many famous experts and scholars from China and overseas were invited to the conference to deliver special reports. The conference also scheduled paper presentations, workshops on hot research issues, a young scholar forum, a new committee forum, an industry forum, evaluation activities, and poster exchanges, and Chinese authors of international journals and conferences (such as TOIS, SIGIR, WWW, CIKM and ACL) communicated papers. During the conference, there was a meeting of the Retrieval Committee of the Chinese Information Processing Society of China (CIPS).

A total of 109 papers were submitted for this conference. In order to ensure the quality of the review, the Procedure Committee organized 84 experts and scholars in the field of information retrieval to participate in the review, so as to ensure that each paper received fair and reasonable high-level feedback from at least three experts in the field. Finally, a total of 63 papers were accepted for presentation at the conference, an acceptance rate of 57.8%. The accepted Chinese-language papers will be recommended for publication in relevant academic journals, and the eight accepted English-language papers are compiled and published in this Springer LNCS series volume.

This year, the conference continued the basic format of last year, continuing to call for papers in English, and we collaborated with Springer to publish the proceedings. The conference invited the authors of papers recently published in the field of information retrieval at top international conferences to introduce and exchange related work. The paper report structure of the conference is a single-venue system, which ensures the efficiency and quality of the conference communication in the form of high-level paper conference reports + poster exchange of all accepted papers. Social media was used for online communication, and selected parts of the conference were reported on-site.

The Program Committee would like to thank the diamond sponsors iFlyTek, Beijing Kuaishou Technology, the gold sponsor Chongqing Shouheng Software, the silver sponsor Baidu, and the bronze sponsor Beijing Bayou Technology for their contributions to this conference. Special thanks to Gao Xinbo, Yin Dawei, ChengXiang Zhai and Cao Chao for their excellent guest reports. Thanks to Liu Kang and Zhang Weinan for organizing the wonderful forum and workshop for young scholars. Thanks to Wang Pengfei for publishing the papers. Thanks to Rosimbo and Yixing Fan for the publicity work of the conference. Thanks to Ren Zhaochun and Luo Cheng for conference sponsorship-related work. Thanks to Zhang Jianxun, Huang Xianying, Xiao Zhaohui, Huang Lifeng and other teachers from Chongqing University of Technology for undertaking the complicated work of organizing the conference. Thanks to Louie, Ma Weizhi,

Iflytek, China Mobile Research Institute, China Mobile Technology Capability Evaluation Center, National University of Singapore, University of Science and Technology of China, Sichuan University, Singapore 6Estates Company, Beijing Maijia Intelligent Technology efforts to organize the “Iflytek-National Information Retrieval Challenge Cup”. Sincere thanks to all the contributors, process committee members, delegates and all the volunteers who worked for CCIR 2022.

We would also like to thank the editorial team of Springer, the Journal of Computers, Computer Research and Development, Pattern Recognition and Artificial Intelligence, the Journal of Chinese Information, Computer Science and Exploration, the Journal of South China University of Technology (Natural Science Edition), the Journal of Shandong University (Science Edition), the Journal of Shanxi University (Natural Science Edition), the Journal of Guangxi Normal University, the Journal of Chongqing University of Technology and other journals for their efforts and hard work on the publication of the Chinese-language and English-language papers of this conference.

The China Conference on Information Retrieval (CCIR) is the most important meeting in China in the field of information retrieval. The meeting, using “create the new engine of the digital economy” as the main theme, consisted of a series of academic activities and focused on a new generation of scientific research on information retrieval technologies. It also provided a wide range of communication platforms for the dissemination of the latest academic research results in the information retrieval area. Academic study of the information retrieval field aims to meet the demand of humans on the Internet to obtain information quickly and accurately: research results will tend to support the national strategy, promote the development of the Internet and artificial intelligence, provide strong support for the digital economy development of our country, improve the production efficiency of the whole society, and make a significant impact on various fields of social life.

We believe this session was a complete success.

September 2022

Yi Chang  
Xiaofei Zhu

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