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# Artificial Intelligence and Security

8th International Conference, ICAIS 2022 Qinghai, China, July 15–20, 2022 Proceedings, Part I



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#### **Preface**

The 8th International Conference on Artificial Intelligence and Security (ICAIS 2022), formerly called the International Conference on Cloud Computing and Security (ICCCS), was held during July 15–20, 2022, in Qinghai, China. Over the past seven years, ICAIS has become a leading conference for researchers and engineers to share their latest results of research, development, and applications in the fields of artificial intelligence and information security.

We used the Microsoft Conference Management Toolkit (CMT) system to manage the submission and review processes of ICAIS 2022. We received 1124 submissions from authors in 20 countries and regions, including the USA, Canada, the UK, Italy, Ireland, Japan, Russia, France, Australia, South Korea, South Africa, Iraq, Kazakhstan, Indonesia, Vietnam, Ghana, China, Taiwan, Macao, etc. The submissions cover the areas of artificial intelligence, big data, cloud computing and security, information hiding, IoT security, multimedia forensics, encryption and cybersecurity, and so on. We thank our Technical Program Committee (TPC) members and external reviewers for their efforts in reviewing papers and providing valuable comments to the authors. From the total of 1124 submissions, and based on at least three reviews per submission, the Program Chairs decided to accept 166 papers to be published in three LNCS volumes and 168 papers to be published in three CCIS volumes, yielding an acceptance rate of 30%. This volume of the conference proceedings contains all the regular, poster, and workshop papers.

The conference program was enriched by a series of keynote presentations, and the keynote speakers included Q.M. Jonathan Wu and Brij B. Gupta, amongst others. We thank them for their wonderful speeches.

There were 68 workshops organized in ICAIS 2022 which covered all the hot topics in artificial intelligence and security. We would like to take this moment to express our sincere appreciation for the contribution of all the workshop chairs and participants. We would like to extend our sincere thanks to all authors who submitted papers to ICAIS 2022 and to all TPC members. It was a truly great experience to work with such talented and hard-working researchers. We also appreciate the external reviewers for assisting the TPC members in their particular areas of expertise. Moreover, we want to thank our sponsors: ACM, ACM SIGWEB China, the University of Electronic Science and Technology of China, Qinghai Minzu University, Yuchi Blockchain Research Institute, Nanjing Normal University, Northeastern State University, New York University, Michigan State University, the University of Central Arkansas, Dublin City University,

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