Preface

The International Conference on Health Big Data and Smart Sports is a leading conference held annually. It aims at building a shared platform of academic resources, expanding channels of international academic exchange in Health Big Data and Smart Sports, promoting scientific innovation on a global scale, and strengthening academic cooperation between China and the outside world. It is a great opportunity to promote academic communication and collaboration worldwide.

This volume contains the papers presented at the 2022 2nd International Conference on Health Big Data and Smart Sports (HBDSS 2022), held during November 18th-20th, 2022 in Xiamen, China (virtual form). For the safety concern of all participants, we decided to hold it as a virtual conference which is also effective and convenient for academic exchange and communication. Everyone interested in these fields were welcomed to join the online conference and to give comments and raise questions to the speeches and presentations.

The online conference was composed of keynote speeches, oral presentations, and online Q&A discussion, attracting about 60 individuals from all over the world. We have invited six sophisticated professors to perform keynote speeches. Among them, Prof. Sheng-Uei Guan from Xi'an Jiaotong-Liverpool University, China delivered a keynote speech on Input Space Partitioning for Machine Learning. In this presentation, he introduced an input attribute grouping method to improve the performance of learning. During training for a specific problem, the input attributes were partitioned into groups according to the degree of inter-attribute promotion or correlation that quantifies the supportive or negative interactions between attributes. After partitioning, multiple sub-networks were trained by taking each group of attributes as their respective inputs and the final classification result was obtained by integrating the results from each sub-network. All keynote speakers made brilliant speeches and shared unique experience and insights, and we are hoping the pandemic soon come to an end and we could see each other face to face next year.

HBDSS 2022 received a great many submissions in the areas of electronic information technology and computer engineering. Each submission was reviewed by at least two expert reviewers and the committee picked out some excellent papers that are covered in the proceedings, including but not limited to the following topics: Health Databases and Data Standards, Education Teaching Process, VR/AR/Cloud Computing Fusion Sports, Networking and College Sports, Sports IoT, etc.

On behalf of the Conference Organizing Committee, we would like to thank the Program Committee members and external reviewers for their hard work in reviewing and selecting papers. And we would like to acknowledge all of those who have supported HBDSS 2022. In particular, our special thanks go to the VDE Verlag GmbH. Hopefully, all participants and other interested readers can benefit significantly and scientifically from the proceedings and find it rewarding in the process.

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