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Introduction

In recent years, pattern recognition has become a hot research topic thanks to recent advancements in deep machine learning driven by big data. In light of the fast-paced advancements in pattern recognition taking place all over the world, it is of great interest to keep an eye on state-of-the-art research and development and to facilitate collaboration in multidisciplinary research areas. With this end in mind, it's a great pleasure for me to invite you to participate in the 5th International Workshop on Pattern Recognition during June 5-7, 2020.

As you have been aware, COVID-19 has evolved into a pandemic, and the safety and well-being of our participants is of paramount importance to us. Therefore, after serious consideration, the committee made the difficult decision to have IWPR 2020 as a fully virtual conference.

The aim of the conference is to address and deliberate on the latest technical status and recent trends in the research, development and application of pattern recognition. This conference has been designed with the view of providing an opportunity for scientists, engineers, industrialists, students, and other professionals from all over the world to interact and exchange their new ideas and research outcomes for future collaboration.

This year, IWPR solicited 31 submitted papers from various countries all over the world. The proceedings of IWPR 2020 contain 18 selected papers from the conference that have been presented at the virtual conference. They provide upto-date, comprehensive and worldwide state-of-the-art knowledge and techniques in this field. Each contributed paper was rigorously peer-reviewed by international reviewers in related fields from all over the world who were drawn from the organizing and advisory committee members. The proceedings cover the following specific areas: pattern recognition, target detection, image transformation and analysis, image detection technology and application, image processing and application, signal analysis and processing, and computer science and engineering.

On behalf of the organizing committee, we'd like to express our heartful gratitude to all the reviewers for their great professionalism and efforts and thank all the participants and sponsors for their valuable contributions and support of IWPR 2020.

General Chair **Prof. Xudong Jian**