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Introduction

The 2024 3rd International Conference on Image Processing, Object Detection and Tracking (IPODT 2024) was successfully held 9–11 August 2024, in Nanjing, China. The International Conference on Image Processing, Object Detection and Tracking (IPODT) has been held three times in a series of topical meetings, and this year IPODT 2024 was attended by about 100 participants working or interested in image processing, and object detection from different countries and regions.

For this 3rd conference, we chose Nanjing as our venue and met with our old and new friends. While the location of the conference has been changed, what remained invariant is the aim of this series of conferences, which is to discuss the recent advances and new perspectives in image processing, and object detection and tracking in a pleasant and friendly atmosphere. At this conference, we had a comprehensive overview of this fascinating field and of future scenarios thanks to the participation of keynote speakers, distinguished delegates, and all the authors from around the world.

The conference presented an outstanding paper volume covering the most recent advances in image processing, and object detection and tracking, including Animation and Motion Capture, 3D Images and Models, Machine Learning Technologies for Vision, Visual Computing and Graphics, Signal Processing and Target Recognition in Optical Radar, Computational Imaging and Optical Coding, Object Detection Based on Optical Features, etc. The papers included in the Proceedings of IPODT 2024 represent a collection of plenary talks, invited speeches and other contributions.

The conference agenda consisted of keynote speeches, oral and poster presentations, as well as academic investigation, including many hot-topic speeches and presentations highlighting the most recent achievements and advances in related disciplines and domains. The main program included a keynote speech session by Zhenghao Shi (IEEE Senior Member, Professor from Xi'an University of Technology, China) and Jun Wang (IEEE Senior Member, Associate Professor from Shanghai University, China). Professor Zhenghao Shi explored the key issues of wide-area object detection and tracking based on deep learning, and reported his team's work on detecting and recognizing wide-area objects using deep convolution and Transformer technology. Professor Jun Wang, on the other hand, presented his research on building computer-aided diagnosis models for autism spectrum disorder, one of the most complex brain diseases. Their wonderful keynote speeches and sharing of the latest academic research achievements led to heated discussion and thinking among all the participants.

We would like to thank all the participants, especially those who contributed speeches, posters and manuscripts, for making IPODT 2024 such an exciting and

memorable conference. We acknowledge all the committee members for their efforts in organizing this conference, putting together the outstanding program, and preparing for the conference's Proceedings. Finally, we extend our gratitude to all our colleagues whose friendly and efficient service contributed much to the success of the conference.

The Committee of IPODT 2024