



Record

Record 5 from Compendex for: ((2020 Asia-Pacific Conference on Image Processing, Electronics and Computers) WN ALL), 1884-2022

[Back to results](#)[Full text](#)[Abstract](#)[Detailed](#)[Compendex Refs](#)☐ Ocean ship detection and

Source: *Proceedings of 2020 Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2020*, p 218-222, April 2020, *Proceedings of 2020 Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2020*; ISBN-13: 9781728160665; DOI: 10.1109/IPEC52390.2020.9121116; Article number: 9121116, Conference: 2020 Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2020, April 14, 2020 - April 16, 2020; Publisher: Institute of Electrical and Electronics Engineers Inc.

Author affiliation: ¹ Beijing, China

Abstract: Because the **image** of UAV aerial photography is easy to be affected by light, sea area and other conditions, there are many kinds of ships. Under different conditions, the characteristics of ships are different, which makes the target recognition more difficult. In order to improve the efficiency of sea surface supervision and make the sea surface management more intelligent, an ocean ship detection algorithm based on aerial photography **image** is proposed. In this paper, the improved Yolo algorithm is mainly used for high-efficiency ship detection of aerial video, which can achieve real-time performance and detection speed of 23fps. In order to improve the accuracy, this paper proposes a standardized mechanism of fixed frame length detection results, which uses deep learning mask RCNN algorithm for fine detection of specific frame **images**, and the detection map is 85%, which improves the detection speed without affecting the detection speed. The accuracy of the algorithm forms an efficient and accurate algorithm for the detection of ships on the sea, which brings convenience to the management of the sea.

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Main heading: **Image enhancement**

Controlled terms: **Aerial photography** - **Antennas** - **Deep learning** - **Efficiency** - **Photographic equipment** - **Ships** - **Surface waters**

Uncontrolled terms: **Aerial images** - **Detection speed** - **High-efficiency** - **Real time performance** - **Recognition algorithm** - **Sea surfaces** - **Ship detection** - **Target recognition**

Classification code: **444.1** Surface Water - **742.1** Photography - **742.2** Photographic Equipment - **913.1** Production Engineering

Databases: Compendex



Record

Record 3 from Compendex for: ((2021 2nd Asia-Pacific Conference on Image Processing, Electronics and Computers) WN ALL), 1884-2022

[Back to results](#)[Full text](#)[Abstract](#)[Detailed](#)[Compendex Refs](#)☐ Intelligent automatic processing of

Source: *Proceedings of IEEE Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2021*, p 1170-1173, April 14, 2021, *Proceedings of IEEE Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2021*; ISBN-13: 9781728190181; DOI: 10.1109/IPEC52390.2021.9421116; Article number: 9421116, Conference: 2nd IEEE Asia-Pacific Conference on Image Processing, Electronics and Computers, IPEC 2021, April 14, 2021 - April 16, 2021; Publisher: Institute of Electrical and Electronics Engineers Inc.

Author affiliation: ¹ Wuhan, China

Abstract: With the continuous progress of science and technology, artificial intelligence has been applied to all aspects of life, and deep learning is closely connected with artificial intelligence. Therefore, the places where artificial intelligence is applied in all walks of life have the shadow of deep learning. Sports **image** is a kind of video which needs continuous motion. Behavior recognition is to analyze and classify the behavior in the video. This paper analyzes the detection of athletes' sports video, which refers to the identification of athletes' behavior. Therefore, based on the existing behavior detection and the extraction ability of deep learning, this paper uses the improved convolutional neural network (TP3DResNet) to study the behavior recognition. The experimental results show that the accuracy of the improved convolutional neural network is 89.9% compared with other behavior recognition algorithms.

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Main heading: **Deep learning**

Controlled terms: **Behavioral research** - **Convolution** - **Convolutional neural networks** - **Image processing** - **Learning algorithms** - **Sports**

Uncontrolled terms: **Automatic processing** - **Behavior detection** - **Behavior recognition** - **Continuous motions** - **Image-based** - **Science and Technology** - **Sports video**

Classification code: **461.3** Biomechanics, Bionics and Biomimetics - **716.1** Information Theory and Signal Processing - **971** Social Sciences

Databases: Compendex