

## Special Issue

# Transformer Applications in Target Tracking

### Message from the Guest Editors

A convolutional neural networks is a neural network architecture for processing spatial data, such as images and videos. Given their good translational invariance and local perceptibility, they have been widely used in target classification and target tracking. However, CNNs cannot model long-range information, and they cannot effectively extract long-range feature information of the target to be tracked, which affects the efficiency and accuracy of target tracking. Since the release of transformer-based ChatGPT 3.0 on June 11, 2020, they have provided the powerful capability to process sequence data. Although the CNN model has achieved great success in the field of target tracking over the years, there are still many problems in the practical application of the target tracking problem in complex scenes. This situation shows that there is a non-negligible gap between the theoretical progress in related fields and practical applications. Therefore, we invite papers on theoretical research and practical applications related to transformer architecture in the field of target tracking.

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### Guest Editors

Dr. Fengping An

Prof. Dr. Haitao Xu

Dr. Chuyang Ye

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### Deadline for manuscript submissions

31 October 2025



## Sensors

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