

# A Method of Rate-based Behavior Recognition

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**Abstract**—This paper presents a method to significantly improve the accuracy of behavior recognition and overcome the physical limitations of recognition speed. It performs learning based on variable-sized behavior times for the same behavior, and suggests a method to match the learned frame rate to the inference model. Since it takes a lot of time to construct a skeletal feature map provided as the input of the inference model, in this paper, by pre-calculating and configuring the feature points of each video frame and storing them in a queue, it is possible to avoid repetitive calculations and reduce the input configuration time of the inference model by calculating only the feature points of new video frames. With the implementation of the present invention, inference for various frame rates is possible, and the accuracy of behavior recognition can be increased through frame rate matching.

**Keyword**— Behavior, Action, Human skeleton, Object detection, Human pose



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