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Estimation of crowd density applying wavelet transform and machine learning

Koki Nagao, Daichi Yanagisawa, Katsuhiko Nishinari

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The highlights of our research are as follows:

- (i) We developed a new measuring method of crowd density using machine learning.
- (ii) Angular velocity data obtained from commercial tablets were used.
- (iii) The wavelet transform improves accuracy of the prediction of crowd density.
- (iv) We conducted similar experiments twice to estimate the generalization performance.
- (v) Time series of angular velocity and crowd density was related.

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