

## View-independent person identification from human gait.

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Based on a three-dimensional (3D) linear model and the Bayesian rule, a method is explored to identify human walkers from two-dimensional (2D) motion sequences taken from different viewpoints. Principal component analysis constructs the 3D linear model from a set of Fourier represented examples. The sets of coefficients derived from projecting 2D motion sequences onto the 3D model by means of a maximum a posterior estimate is used as a signature of a walker. Simulating an identification experiment on a set of walking data we show that these signatures show invariance across viewpoints and can be used for viewpoint-independent person identification.