

ABSTRACT

COORDINATE TRANSFORMATION METHOD, COORDINATE TRANSFORMATION
DEVICE, MOTION ANALYSIS METHOD, MOTION ANALYSIS DEVICE, AND
COMPUTER PROGRAM

The object of the present invention is to provide a coordinate transformation procedure that allows for detailed analysis of motion such as walking by using motion information collected from one position. The present invention is a coordinate transformation method characterized by carrying out a procedure to: acquire three-dimensional skeletal information of a subject in motion who is described under a first coordinate system comprising a x' direction, a y' direction, and a z' direction, which are mutually orthogonal; use the skeletal information to calculate a Y direction being the traveling direction of the subject, a Z direction along the torso of the subject, and a X direction orthogonal to the Y direction and the Z direction; and transform the first coordinate system into a second coordinate system comprising the X direction, the Y direction, and the Z direction.