Improving intellectual capability to enhance "a Socially Active Life" for overcoming the reducing labor force

Support using ICT for succession of skills concerning body coordination and team cooperation

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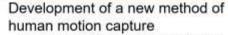
Summary:

In the aging society with fewer children, it is considered to efficiently hand embodied skills, as a type of "tacit knowledge," on to the next generation in order to develop young people. This research project aims to quantitatively

clarify the underlying mechanism of embodied skills in performing arts, including Japanese traditional arts, and team sports such as basketball. In addition, it aims to construct teaching systems which enable to hand such embodied skills on to the next generation. For these purposes, this project also aims to establish a revolutionary method for human motion capture that is completely different from the existing ones in measurement principle and accuracy, as well as application range:

This method will enable us to measure the rapid motions of performers and athletes in wide-range areas like actual stages or sports stadiums under such a natural condition that they are wearing their costumes or sportswear as normal.

In the end, evidence-based methods for development of young players, which do not rely on an oppressive and commanding way of teaching and meet the needs of the aging society with fewer children, will be provided, which enables young people to enter performing arts and team sports at ease.



for those who wear costumes, in wide-range areas, with high sampling rate and accuracy

Measurement of performers and athletes on actual stages and sports stadiums





Sensing (motion/physiological measurement) + Machine learning

Analysis of the underlying mechanism of embodied skills and construction of teaching systems enabling to hand such embodied skills on to the next generation







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