Virtual Player for Learning by Observation to Assist Karate Training

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Abstract : It is well known that sport skill learning is facilitated by video observation of players' actions in sports. The optimal viewpoint for the observation of actions depends on sport scenes. On the other hand, it is impossible to change viewpoint for the observation in general, because most videos are filmed from fixed points. The study has tackled the problem and focused on karate match as a first step. The study developed a method for observing karate player's actions from any point of view by using 3D-CG model (i.e. virtual player) obtained from video images, and verified the effectiveness of the method on karate match.

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