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Refereed Article

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Motor Skill as Dynamic Constraint Satisfaction

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Abstract: *Motor skill is one of the most basic intelligent activities by human beings. We can acquire various high level physical skills such as throwing, typewriting, playing musical instruments and so on. However, it is difficult to understand the mechanism of the skill by experts. Here, we discuss motor skill in terms of dynamic constraint satisfaction including motion integrity constraint (MIC). Some biomedical experiments show that some constraints for joint angle coordination and combinations of activated muscles are satisfied by experts. If we know the skill achievement mechanism by experts, it can be quite useful to improve amateurs' skills. In addition, it can also be helpful to prevent injuries coming up from bad muscles usages.*

Publication and review history

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