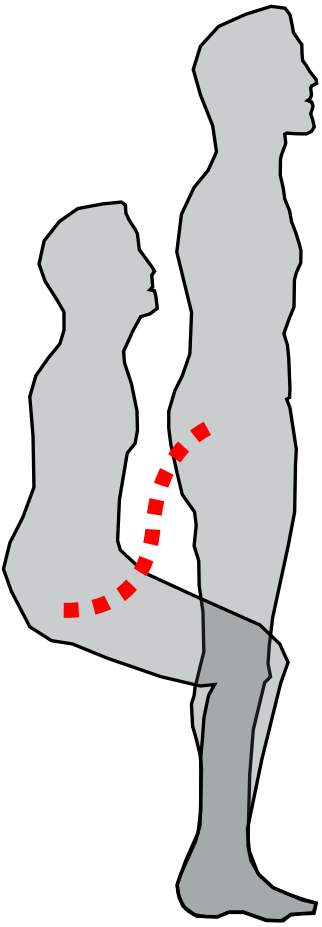
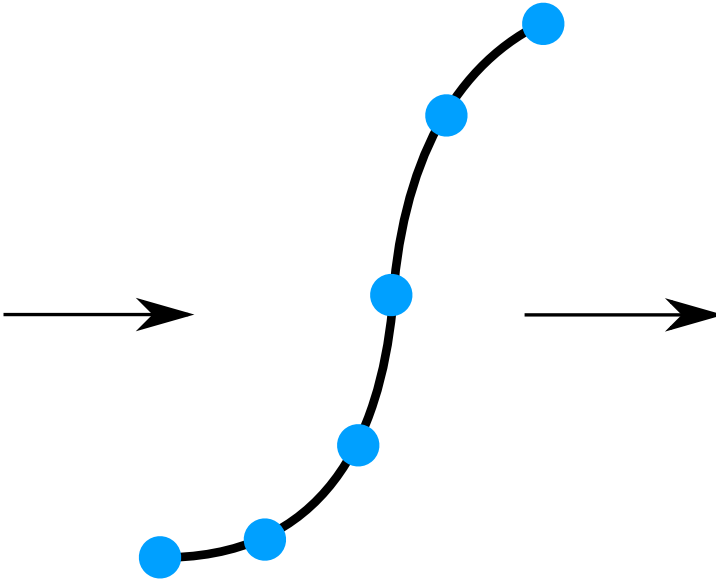


Task of Moving Hip From Sit to Stand In Natural Motion

Representation Suitable for Solvers



Requires Understanding

the task and solver needs

Computational Solver

Mechanism Design

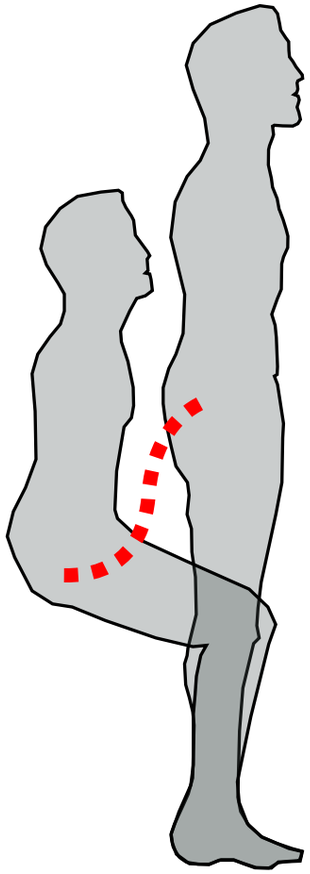
Most Prior Research Focused on

Critical in Practice

1. Precision Points
2. Fourier Curve Fitting*
3. Geometric Constraints

1. **Global Optimization**
    - Genetic
    - Sim. Annealing
    - PSO
2. **Homotopy**
3. **Algebraic Fitting**

Mechanism Design



Task of Moving Hip
From Sit to Stand
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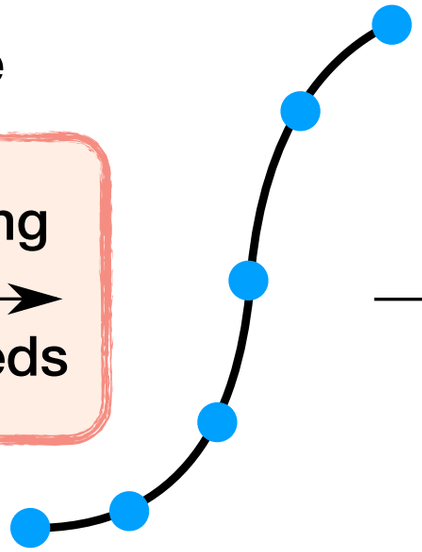

Representation
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1. **Precision Points**
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Synthesis Frameworks