

Peer Review

Review of: "FastGrasp: Efficient Grasp Synthesis with Diffusion"

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The paper introduces fastgrasp, a diffusion-model-based one-stage approach for generating grasping poses in hand-object interactions. This method eliminates intermediate representations and iterative optimization, resulting in faster prediction and improved physical plausibility. The strength of this paper lies in its ability to generate grasping poses more efficiently. By introducing an adaptation module, the proposed method ensures that generated grasping poses are realistic and physically plausible.

However, the paper still has the following areas for improvement:

1. The paper claims improved diversity in the introduction, but no experiments on diversity are presented.
2. Section 4.2 lists excellent evaluation metrics, but the corresponding results are missing.
3. Real-world experiments would better validate the stability of generated grasps.
4. Figure 1 has two "Step 1" labels, which is confusing and should be corrected.
5. The definition of DDPM appears in Section 3.4 but is used earlier in Section 2.3. Terminology should be introduced before usage.

Declarations

Potential competing interests: No potential competing interests to declare.