

Application of haptic devices expanded to fields like virtual manufacturing, virtual assembly or medical simulations.

Advances in development of haptic devices have resulted in a wide distribution of asymmetric 6/3-DOF haptic devices.

However, current haptic rendering algorithms work correctly only for symmetric devices.

This thesis analyzes 3-DOF and 6-DOF haptic rendering algorithms and proposes an algorithm for 6/3-DOF haptic rendering involving pseudo-haptics.

The 6/3-DOF haptic rendering algorithm is implemented based on the previous analysis and tested in a user study.