

## Computational Illusion for Impossible Motions

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### Abstract

This paper presents a method for designing three-dimensional solids that generate optical illusion of “impossible motions”, dynamic versions of impossible objects. Impossible objects are contradictory impressions of solids raised by anomalous pictures, and are usually considered unrealizable, but there are several tricks for constructing actual solids that look impossible objects. One of these tricks is a non-rectangularity trick, in which faces are connected in arbitrary angles although they look rectangular. This trick can also be used to change static impossible objects into dynamic impossible motions in a systematic manner. This paper describes a method for this purpose, together with examples.