Deformation Lamps is a light projection technique to make the appearance of static objects dynamic. Recently, we have made it applicable not only to two-dimensional pictures, but also to three-dimensional objects. We have also developed a function to dynamically edit the object appearance interactively with the movements of the users. These improvements will enable users to manipulate the appearance of many real objects in any way as they like.

Features

- Giving dynamic visual impressions to static 2D and 3D objects.
- Taking advantages of the properties of the human visual system to neatly integrate color, shape, and motion information.
- Interactive editing of the object appearance.
- Quickly giving a properly matching movement impression to a novel object with the aid of cloud search techniques.
- Simple and low-cost implementation.

Application Scenarios

- Attracting customers’ attentions to products by 1) adding hot air impressions to a cold food model (food replica), 2) giving a charm movement to a stuffed toy, and 3) making a static poster printed on a paper dynamic.
- Editing material impressions of interior objects such as wall, floor, and ceiling.

Deformation Lamps: A perception-based light projection technique to make static objects perceptually dynamic