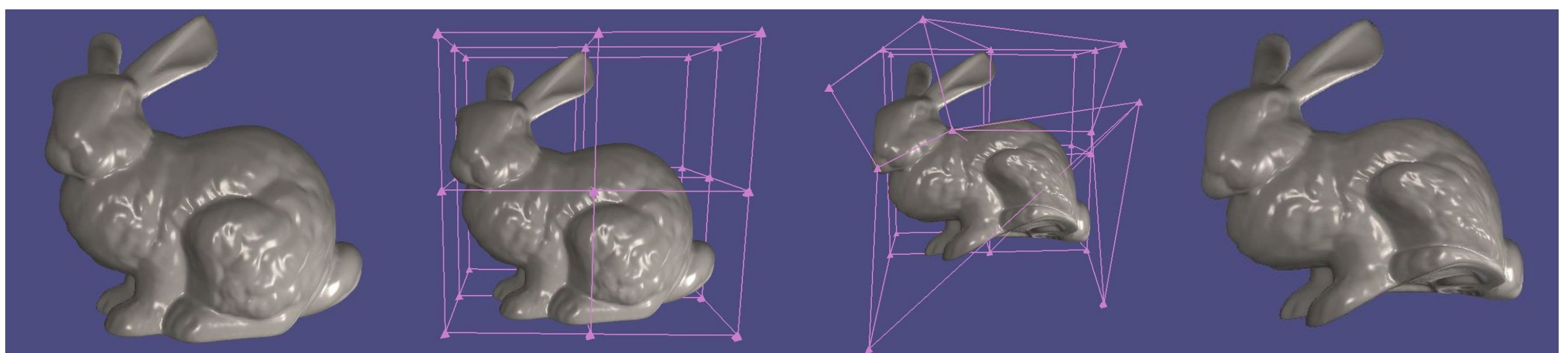
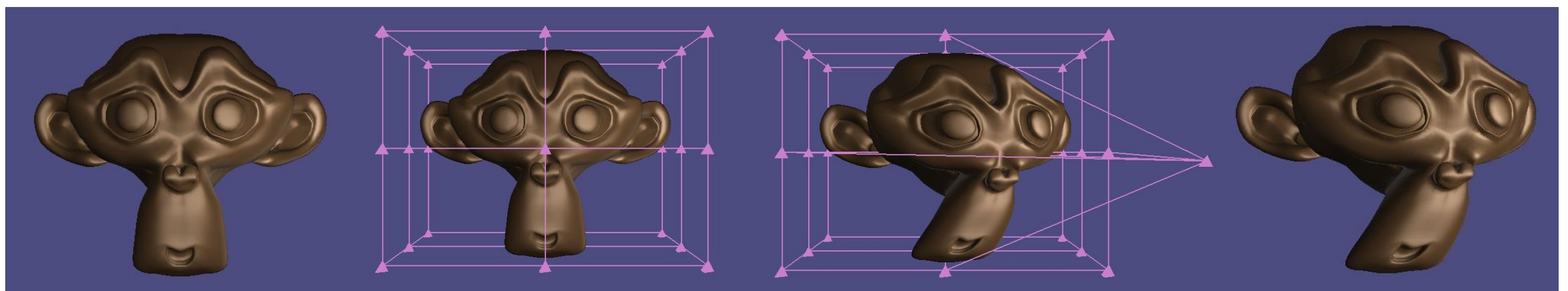


Free-form deformation

Manipulation of 3D solid geometric models

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Project Background:

Free-form deformation is a commonly used technique for model manipulation in computer graphics due to the simplicity of implementation and possibilities of extensions. It was originally proposed by Sederberg and Parry in 1986 but is still being used today as the foundation for more advanced techniques. By understanding the free-form deformation technique through implementation, better modelling tools for computer graphics applications can be created.

Project Objectives:

1. Understand the basic principles behind the free-form deformation technique.
2. Create an application that can load 3D models in the OBJ file format and draw the models using OpenGL 3.3.
3. Implement functions to allow the user to perform free-form deformation on the loaded model.
4. Explore existing uses, improvements, and modifications of the free-form deformation technique.