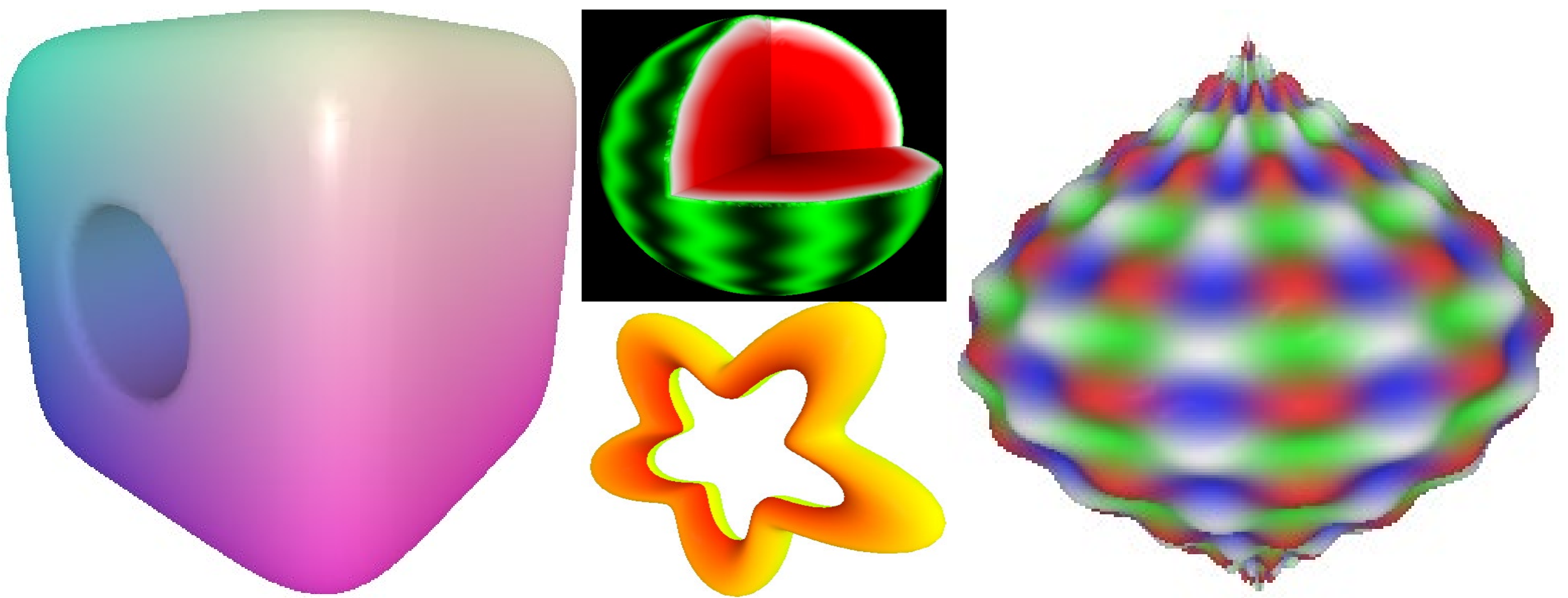


Displaying Objects in Unity

From Mathematical Equations to Visualizing Shapes

Student: Tan Hong Fan Merzen Supervisor: A/P Alexei Sourin



Project Objectives:

The project's main objective is to enhance ShapeExplorer, an existing interactive software built within Unity3D and utilized in the context of the CZ2003 coursework, Computer Graphics and Visualization. ShapeExplorer is designed to aid teaching by providing a dynamic platform that illustrates and solidifies key visualization principles, including mathematical definitions for shapes and sampling resolutions. The ultimate goal is to refine ShapeExplorer's polygonization algorithms to eliminate visual artifacts, ensuring a seamless and accurate representation of shapes for a more effective learning experience in the CZ2003 course.

Functionality supported:

1. Parametric equations
2. Implicit equations
3. Crease Angle threshold
4. Time-dependent shapes

ShapeExplorer User Interface

