CAS 741: Problem Statement
Breaking Effect

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Table 1: Revision History

Date	Developer(s)	Change
2017-09-14	Xiaoye Ma	Version0, new document
Date2	Name(s)	Description of changes
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What problem are you trying to solve?

This project tries to implement breaking effect in codes for 3-D models in video games without help from any plug-in. Including different shapes 3-D object crushing and pieces drifting. The breaking effect program simulates 3-D objects destruction process in vision by implementing scientific computing functions.

Why is this an important problem?

Breaking effect is widely used in 3-D video games and animations for both nature phenomenons and destruction made by human. It is meaningful in game development especially for act games with a background of wars or battles. As one of the most significant measurements on visualization level, nowadays game developers pay more attention to visual effect in large-scale games. A good performance in breaking effect makes a game more realistic and contributes a lot to players game experiences.

What is the context of the problem you are solving?

The breaking effect can be mainly used by game developers in 3-D video games for improving visualization performance, to be played when an 3-D object is broken or an internal explosion happens . It can also be used in movies and 3-D animations by any editor properly. This project does not pay much attention on model creation part so that the program needs to rely on existing 3-D models in unity3D. However the mathematics computing method can be

imported for any available usage.

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[comment —SS]
You can also leave comments for yourself, like this:
[comment —Author]