Assignments of Advanced Computer Graphics

The homework should be submitted before 2018.05.28 23:59.

Assigned homework #5

13.4

Explain, for the z-buffer, depth-sort, Warnock, and BSP-tree algorithms, how piercing polygons would be handled. Are they a special case that must be treated explicitly, or are they accommodated by the basic algorithm?

13.10

When ray tracing is performed, it is typically necessary to compute only whether a ray intersects an extent, not what the actual points of intersection are.

Complete the ray-sphere intersection equation, using the quadratic formula, and how it can be simplified to determine only whether the ray and sphere intersect.

Submission:

Report(word/pdf)

File name: Student ID_name_hw5

e.g. 116034910001_张三_hw5

Email for homework submission: cg_sjtu@126.com

Successful submission will receive reply like "Your homework of computer graphics is received."

Attention: Late submission will be scored less grade.