

Raytracing Report

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1 Module 1

1.1 Blender exporter

I tested/debugged this task by inputting the results back into Blender and checking that it overlayed perfectly onto the original object. To help with this, my Export.py also converts the rotation to Euler degrees.

1.2 Camera space transformations

I tested/debugged this task by taking the output origin and direction for each ray, and writing a script for Blender that added a cylinder from the origin along the direction vector to visually check that it is aligned with the camera.

1.3 Image read and write

I tested this by first using my class to write a .ppm file with a gradient colour and visually checking that this worked (and that the dimensions were as expected). I then tested the read/alter method by reading this .ppm file and altering pixels to add two white lines to the file, which I checked visually.