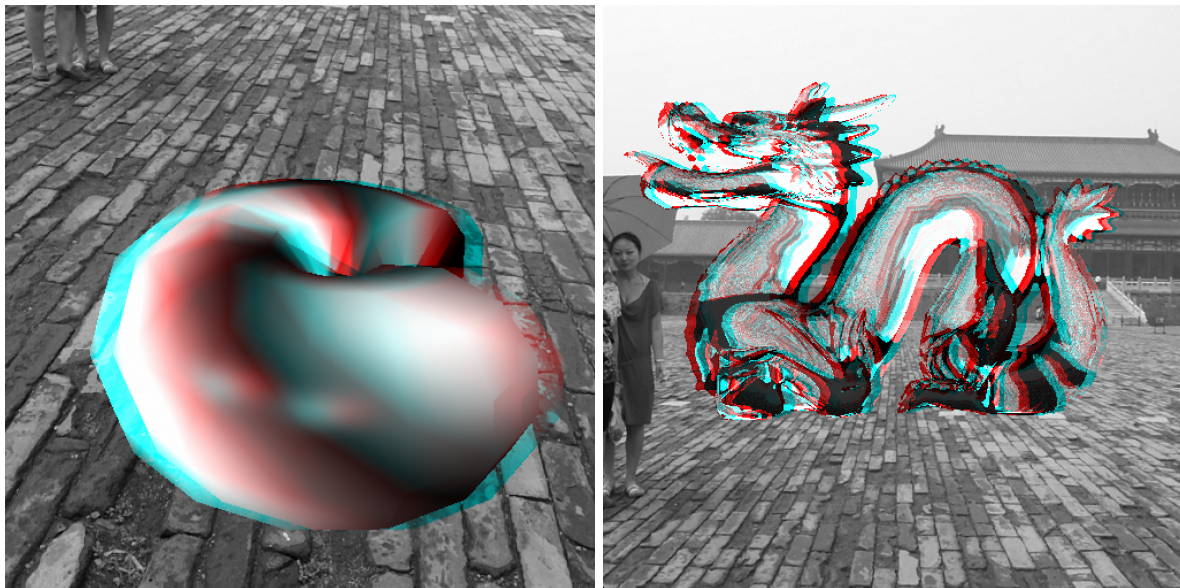


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The BVH I implemented is pretty elementary. I build it top-down, and at each level, I sort the objects within the bounds along the longest axis and split them into two roughly equally sized subtrees.

For extra credit, I implemented 3D red-blue glasses images. I implemented the greyscale anaglyph. Initially, I followed the frequently used red and cyan filtered anaglyph, but I found that it made green objects invisible to the glasses, and given that colors don't remain true with the glasses anyways, I opted for the greyscale anaglyph.



In order to test the anaglyphs, you can check the 3D checkbox and use the slider to adjust the offset. If you have 3D glasses, check it out-- it's kinda cool.

I also implemented antialiasing by adaptive supersampling. I've attached pictures that highlight the sampling pattern (intensity based on the number of antialiasing rays shot per pixel). When antialiasing is checked, you can choose to check or uncheck the adaptive antialiasing option. I followed the algorithm describes such that 5 rays are shot-- the center and each of the corners of the pixel-- and if the difference between their colors is above a certain threshold, it splits the pixel into subdivisions and recurses.

