



Adding Realistic Depth of Field

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Initial Goals

- Create a realistic depth of field
 - F-Stop
 - Aperture
 - Focal Length

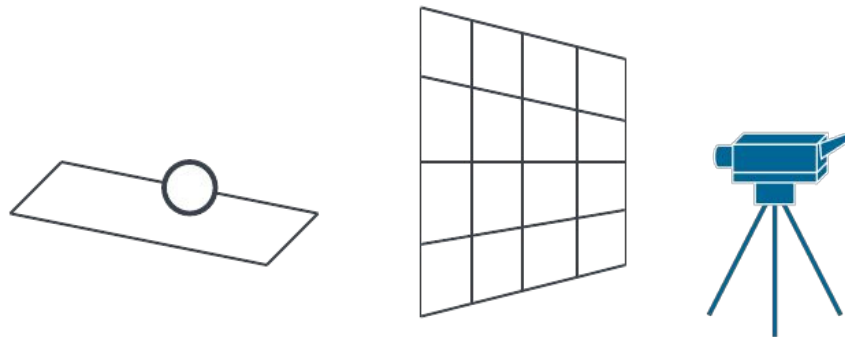


Graphic: <https://marwenphotoblog.wordpress.com/wp-content/uploads/2012/04/dof-comparison3.jpg>



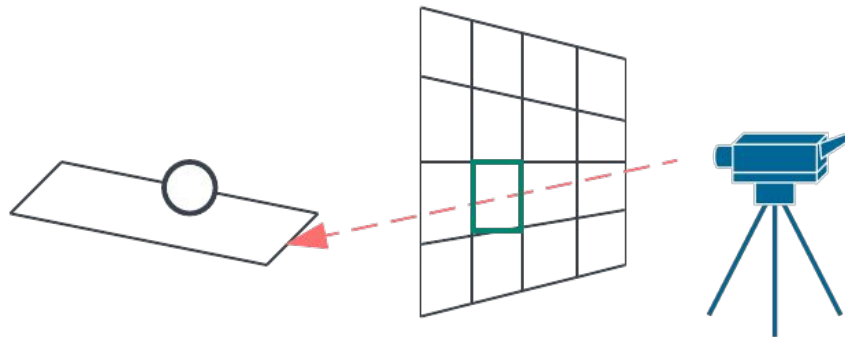
Background Idea

- Mimic the aperture with a ray spawning disk



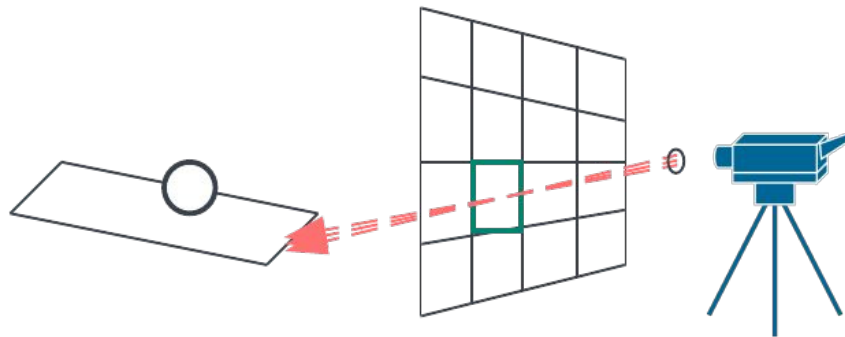
Background Idea

- Mimic the aperture with a ray spawning disk

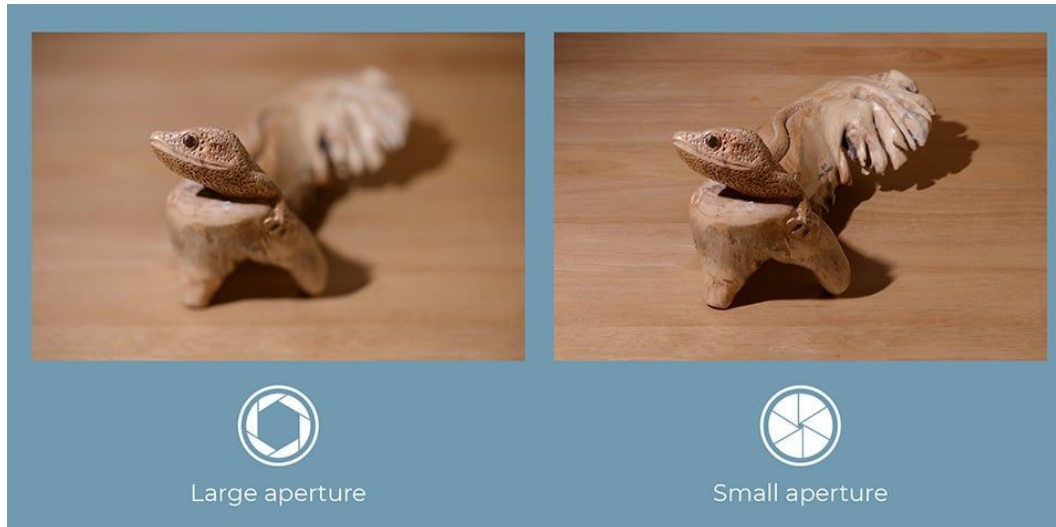


Background Idea

- Mimic the aperture with a ray spawning disk



Goal Results

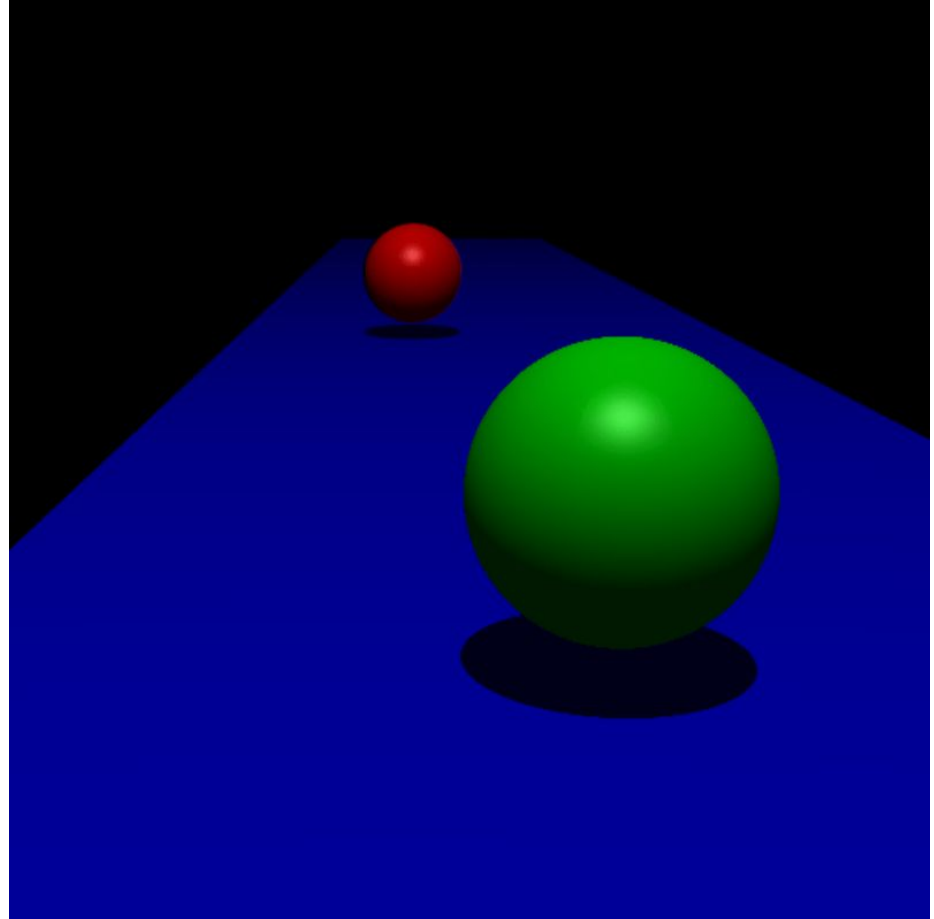


Graphic: <https://photographylife.com/cdn-cgi/imagedelivery/GrQZt6ZFhE4jsKqjDEtqRA/photographylife.com/2018/01/Depth-of-Field-Comparison-f4-vs-f32.jpg/w=960>



Current Results

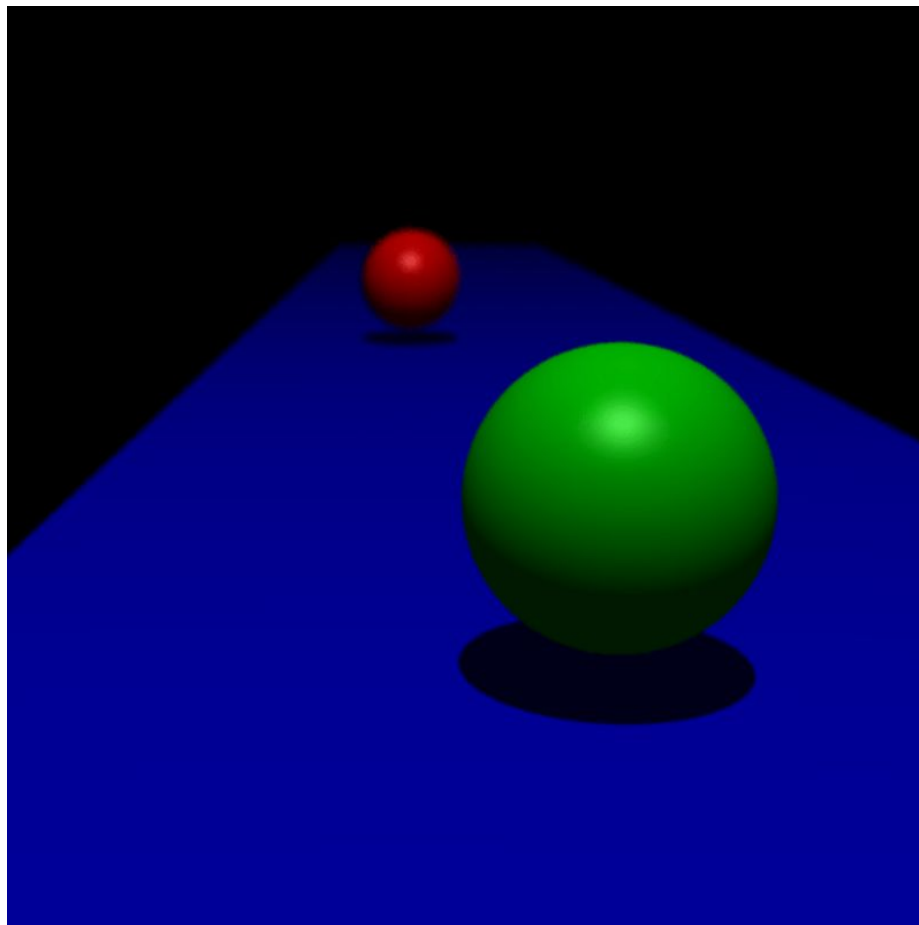
f/22





Current Results

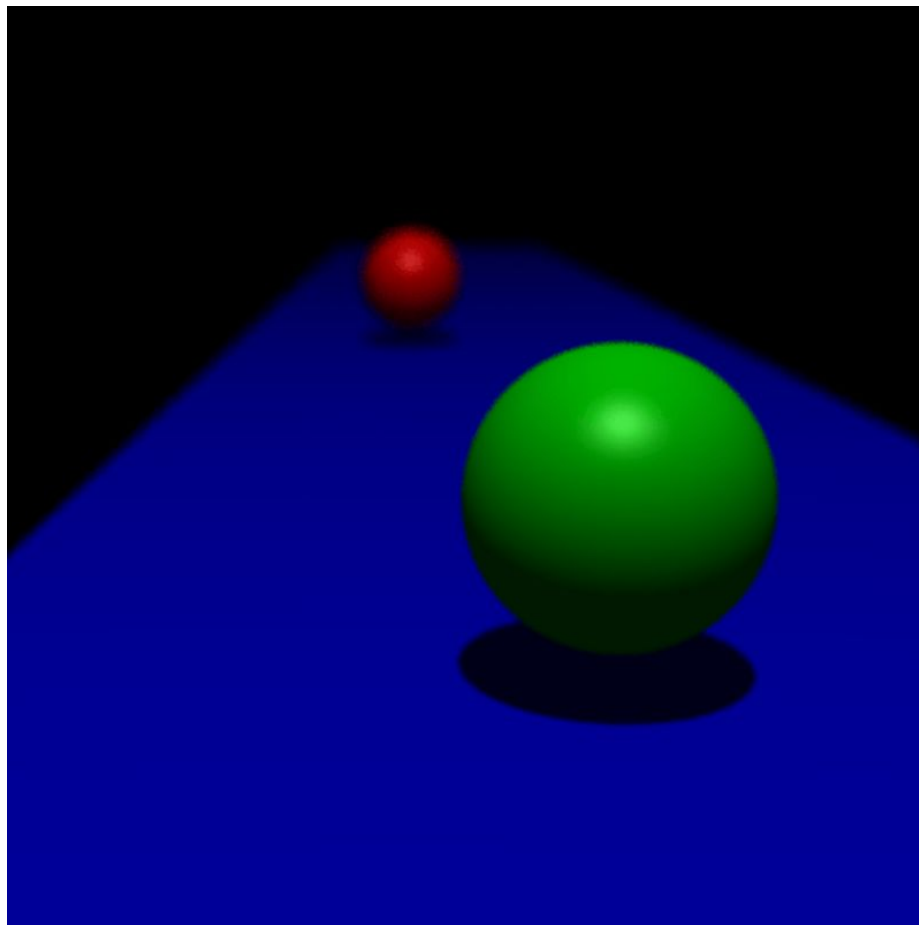
f/2.8





Current Results

f/1.4





Next Steps

- Test different focal lengths
 - Currently it's a constant
- Play around with more complex scenes
 - Further away objects
 - More colors
 - More light sources
- Try to reduce aliasing



Thank you — Any Questions?

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