

3D NPR in the spirit of Amiga games

The basic idea of the project is to create a rendering pipeline that produces images that approximate the look of video games for old gaming systems (emphasis on Amiga) but in 3D. The project would allow for exploration of a 3D world to admire it's beauty. The goal is to trigger a nostalgic feeling in the viewer.

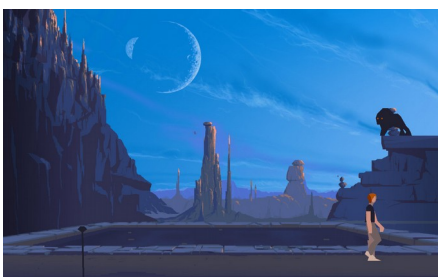
The idea illustrated:



Gallery of inspirations:

<http://www.effectgames.com/demos/canvascycle>

Other notable inspirations:



Breakdown of implementation:

- entirely (or mostly) done as a post-process step
- limited colour palette
- ordered dithering
- fluids as volumes with animated texture (by color cycling)

Challenges:

- appropriate 3D models
- lighting model emphasizing shape
- frame-to-frame coherency
- limitations of Unity 3D game engine (for this particular purpose)

Research goals:

- develop and describe the pipeline and implementation
- contribute the pipeline to hopefully see more works (video games) created in this style
- aesthetic qualities of the result
- uniqueness (no prior original work to accomplish this) – No! This is not similar to Minecraft!

Target platform requirements:

- platform supported by Unity 3D
- Gamepad as for input