

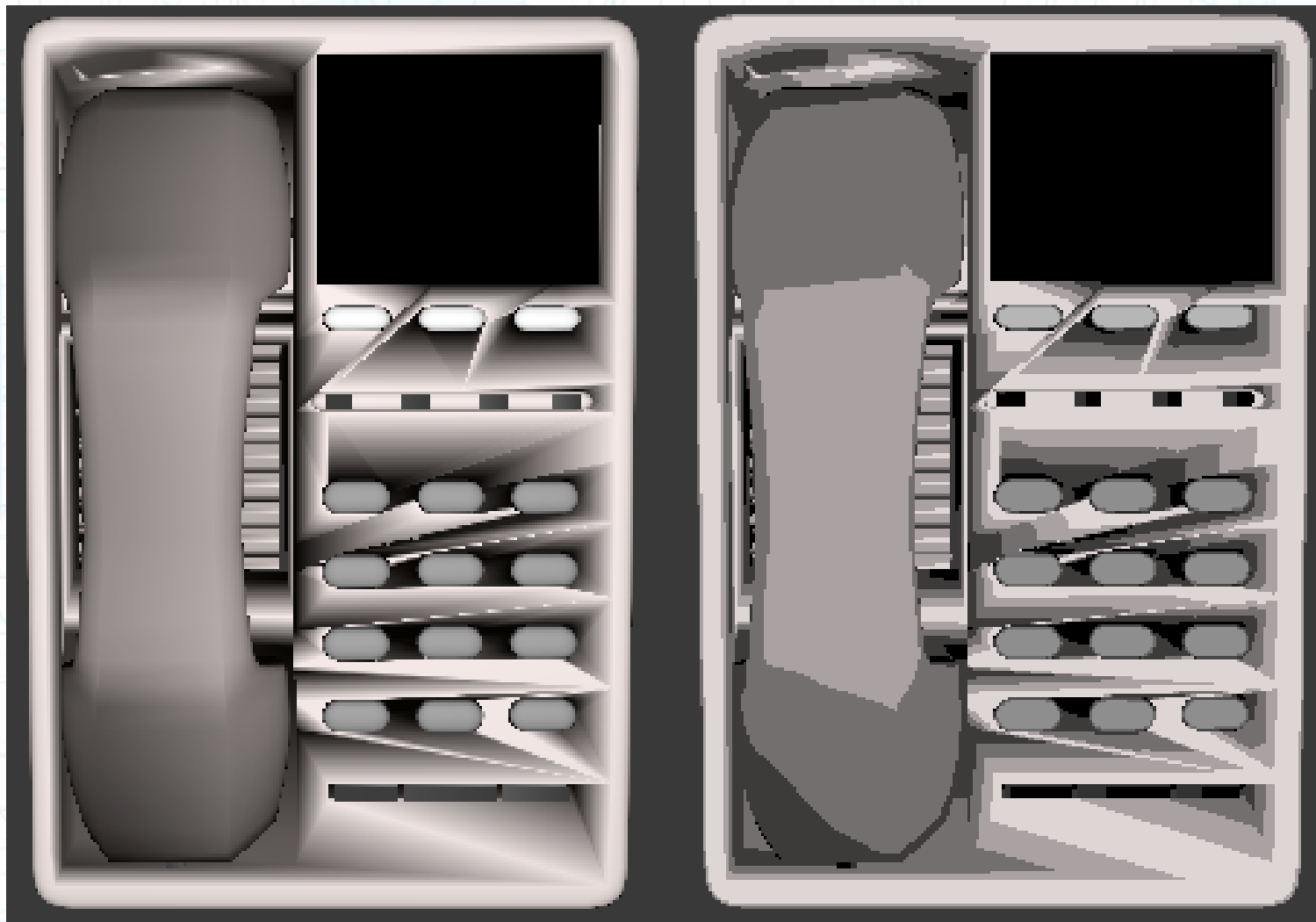
# **Cel-Shading Makes Awesome Game Worlds**

**Gary Steelman  
University of Texas at Dallas  
2012**

# The Idea

- Convert a smooth-shaded, Phong-illuminated model into a cel-shaded model.
- This effect has been used in many highly profitable and critically acclaimed games.
  - The Legend of Zelda: Skyward Sword
  - Tales of Vesperia
  - Borderlands
  - No More Heroes
- Why? I think the style looks cool.

# Visual Comparison



# Live Demo

# Questions?



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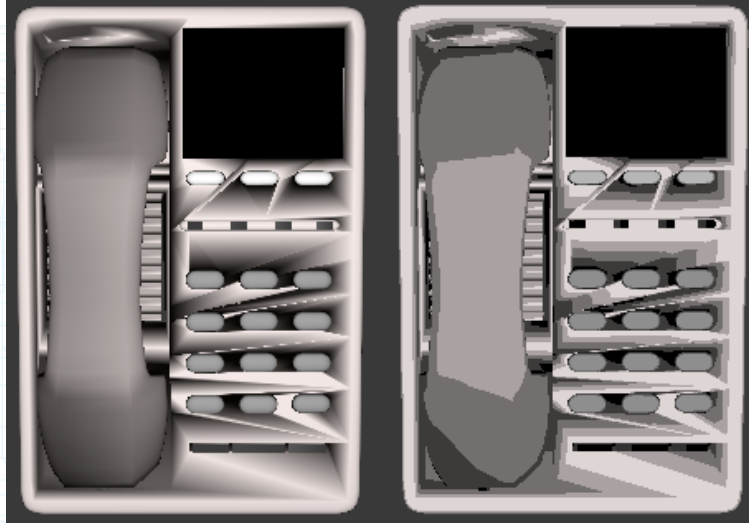
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The idea of this project was to create a cel-shader.

That is, a shader that achieves cartoon-esque style. Why? This style is used in many popular games, and many games I have played have used it. And it created a very compelling, wonderful game world. Learning how to use this style will aid me in creating video games in the future.



## Visual Comparison



On the left is the smooth shaded model and on the right is the cel shaded model.





**Live Demo**

Swap over to a live demonstration of the shader in action.



**Questions?**