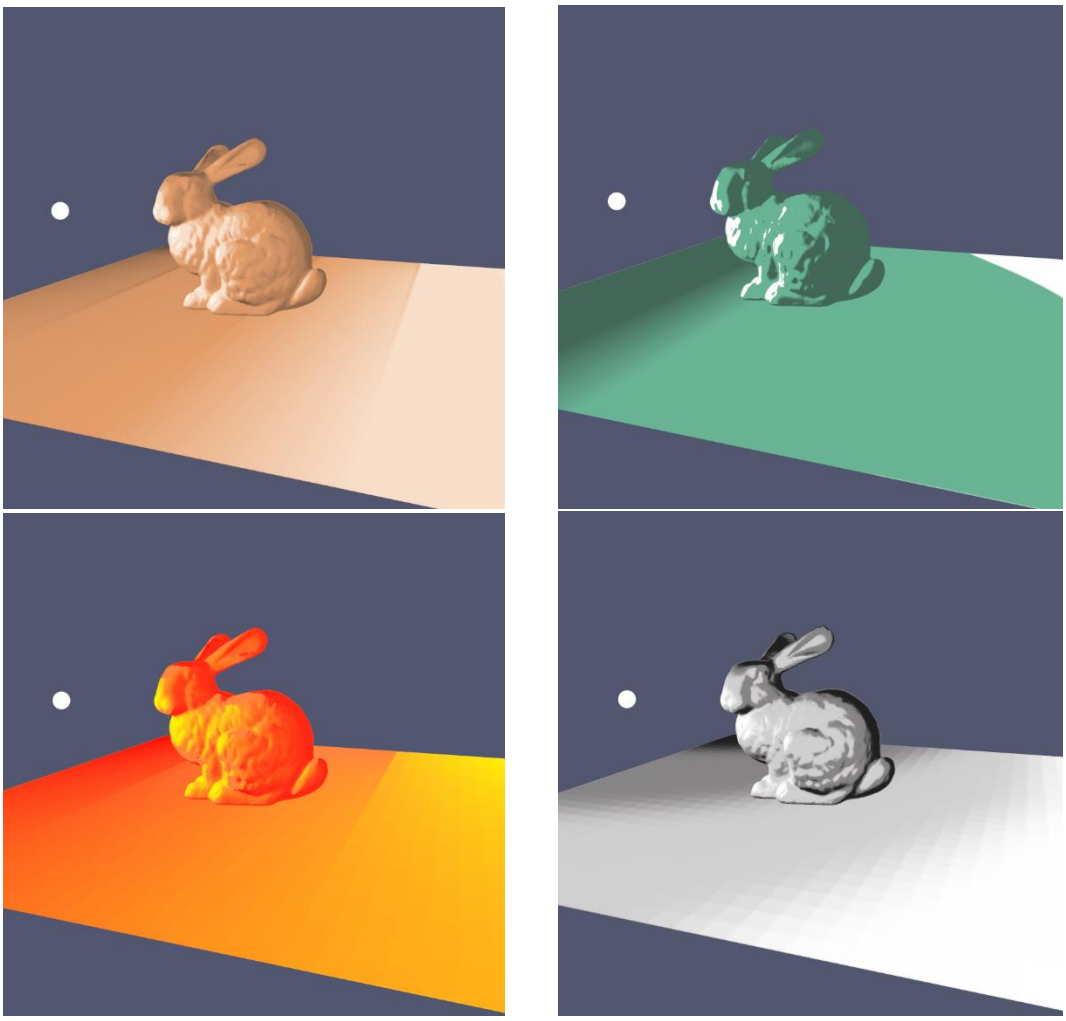
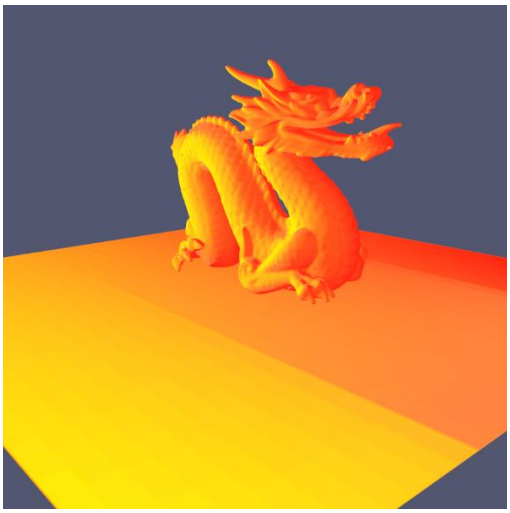
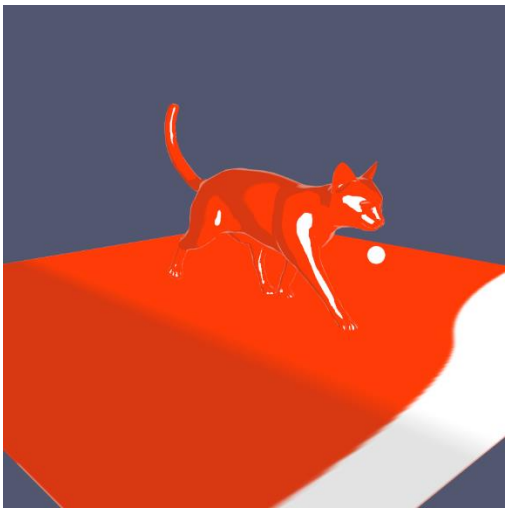


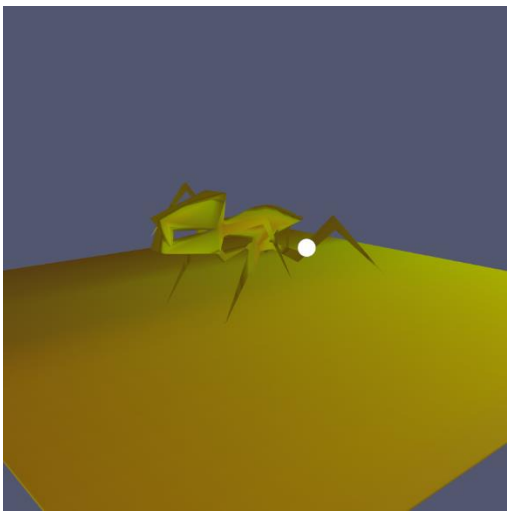
Images demonstrate different textures with r = 2.0, bunny model provided by Allan Rocha



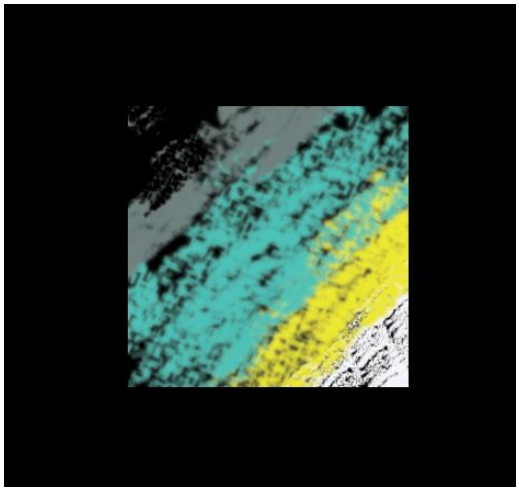
Dragon model provided by Allan Rocha, r = 2.0



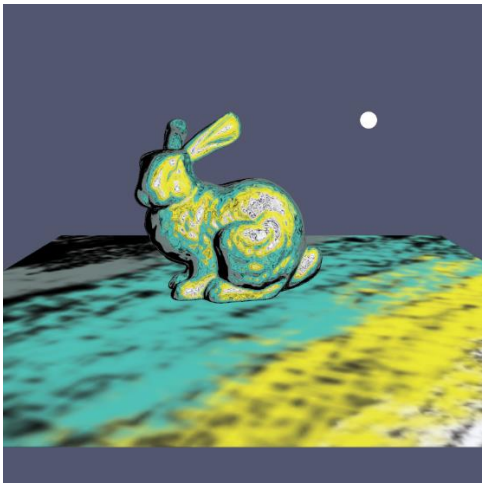
Cat model provided by Erika Harrison, r = 4.8

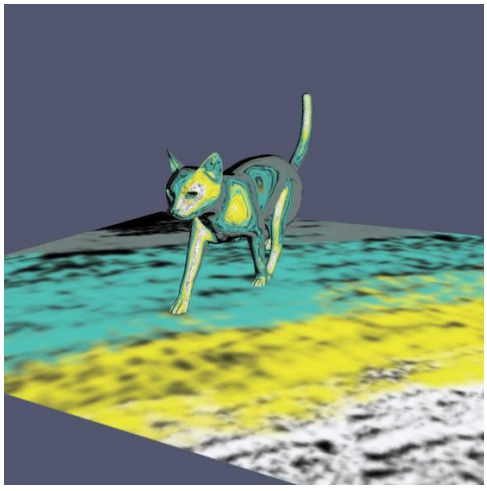


Bug model provided by Erika Harrison, r = 2.0



Texture made by Claire Mikalauskas





Images demonstrating how my texture looks on the models. I wanted to create an artistic texture that applies the concepts from PA-1 (warm color to cool color)

Course: CPSC 591
Assignment: PA-2
Name: Claire Mikalauskas
ID: 10099715

Algorithms:

- Implemented attribute-based texture mapping that performs view-dependant and independent effects based on [1]

Design Choices:

- User input allows the user to change the model in real time (Keys 1, 2, 3, 4)
    - Switch statement used determine current model
    - When a new model is selected, call createVertexBuffer()
    - Each model has pre-defined values for uniform variables in the mesh shader to allow for proper placement and scale of the different models
- User can traverse all textures via Key T
    - texture names are stored in a string
- User can adjust r value, parameter that controls the magnitude of the effect
- If the dot product of N and L is a negative value, program clamps to 0.01

References:

- Code base provided by Allan Rocha in tutorial for loading .png or .obj textures
- Texture files provided by Allan Rocha
- Models provided by Allan Rocha and Erika Harrison
- Reused code for determining current model and user input from PA-1

[1] P. Barla, J. Thollot, and L. Markosian, “X-toon: An Extended Toon Shader,” in *Proceedings of the 4th International Symposium on Non-Photorealistic Animation and Rendering*, 2006, pp. 127–132.