Nuages de points et modélisation 3D
TP 4 : Rendering

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The program is to be called like this `python3 MVA_NPM_TP_4.py`. In this setting it will display the provided normal map and then render it using the Cook-Torrance BRDF model (for result Figure 1).

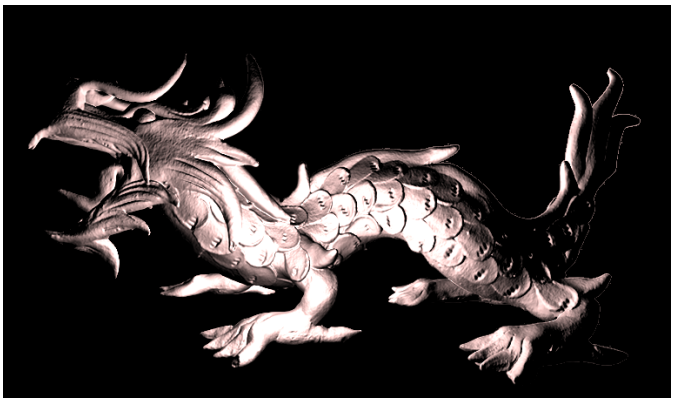

FIGURE 1 – Image rendered using the Cook-Torrance model.

The material model to use can be select using the option `-c` for Cook-Torrance, `-b` for Blinn-Phong (see Figure 2) and `-l` for Lambert (see Figure 3).

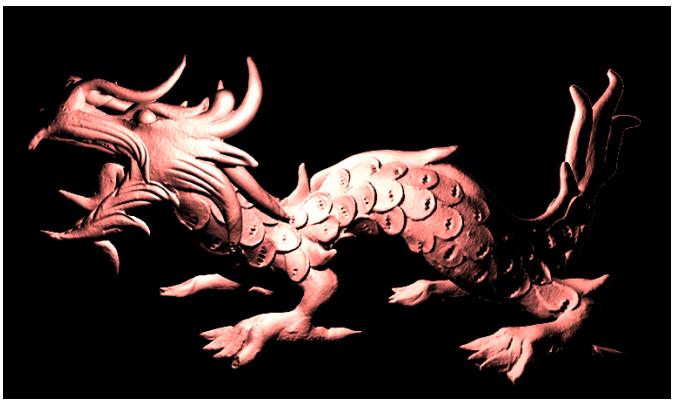

FIGURE 2 – Image rendered using the Blinn-Phong model.

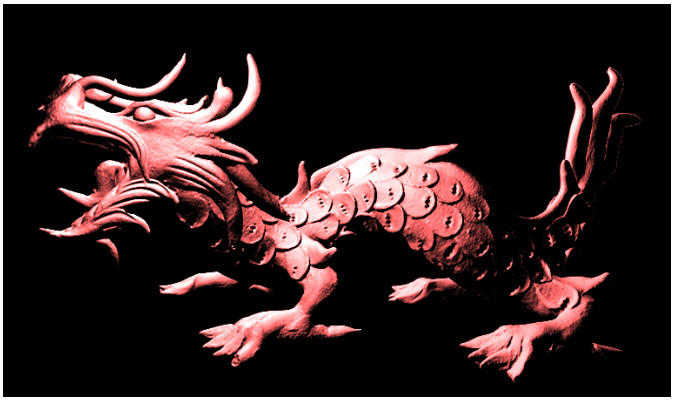

FIGURE 3 – Image rendered using the Lambert model.

I added an interactive mode that allow the user to place light sources, it is enabled using the option `-m interactif`. The code can also generate a video with moving lights, it is enabled using the option `-m video` but it does not work very well.