**048000 – Computational Photography**

**Spring 2022**

**Wet Exercise 3**

**Name: Lior Dvir ID: 207334376**

**Name: Shai Yehezkel ID: 205917883**

**Submission Date: 03/06/2022**

# Supplied Data

The image corresponding with the direct component:

A picture containing text, indoor, computer, projector

Description automatically generated

The image corresponding with the global component:

A picture containing wall, indoor

Description automatically generated

We can see by the direct component image that the scene is mostly grey in color and the warm yellow color stems from the global component.  
Moreover in the direct component the shadows are completely dark which shows that the gradient in the shadow also stems from the global component.  
This includes the frog’s shadows as well as the side walls, the frog’s mouth, eyes, and legs.   
We can also observe the texture of the cracked ground on the sides is only visible in the direct component which shows that light does not generally scatter from the cracks themselves.

As for our custom scene, we have decided to capture a static scene of Indian spices (Curry, Chai & Masala) under single direct lightning placed on white reflective marble. A tea stirrer is obscuring the light in three directions throughout the scene.

The static image looks as follows:

A picture containing text

Description automatically generated

The components are as follows:

|  |  |
| --- | --- |
| **Direct** | **Global** |
| A picture containing text  Description automatically generated |  |

Interestingly, we can assume most of the spices color comes from the global component, supposedly from sub-surface diffractions as we saw with the example of the peppers and grapes.

Moreover, as we stated the white marble was quite reflective, however again it seems that most of its color comes from the global components.

Most global components were filtered in the direct image. Such as shadows underneath the bags. However there is one spot in the bottom center which remains also in the direct component.