**Avery Peiffer**

**4042056**

**ECE 2390 – Fall 2021**

**Problem Set 5 Report**

TEXT RESPONSES

1a. I blurred the images with the 5x5 kernel used in the Sobel functions for computing gradients.

1b. It is difficult to accurately capture the motion since the displacements are more than one pixel. The Lucas Kanade algorithm only really works for short displacements, so it is starting to fall apart on the pairs that are displaced by more than one pixel.

IMAGE OUTPUTS

Ps5-1-a-1.png

A picture containing berry

Description automatically generated

Ps5-1-a-2.png

A picture containing fruit, berry

Description automatically generated

Ps5-1-b-1.png

A close up of a spider

Description automatically generated with low confidence

Ps5-1-b-2.png

A picture containing berry

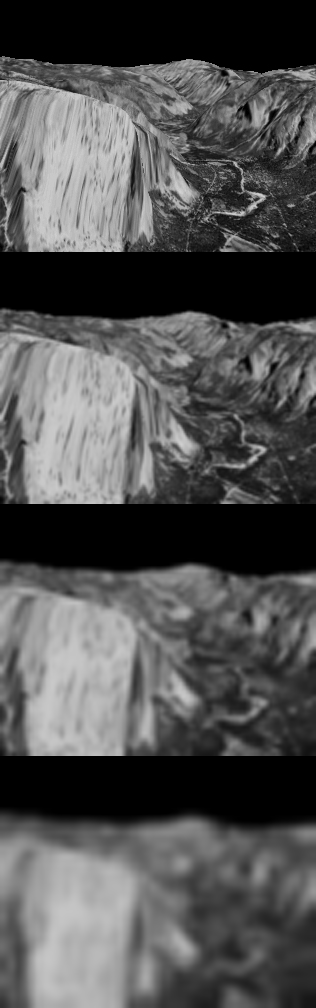
Description automatically generated

Ps5-1-b-3.png

A close up of a spider

Description automatically generated with low confidence

Ps5-2-a-1.png



Ps5-2-a-2.png

Qr code

Description automatically generated

Ps5-3-a-1.png

A picture containing clothing, indoor, underpants

Description automatically generated

Ps5-3-a-2.png

A view of the earth from space

Description automatically generated with low confidence

Ps5-3-a-3.png

A group of people in clothing

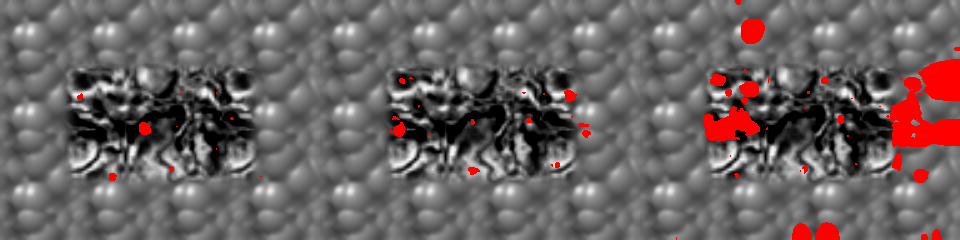
Description automatically generated with low confidence

Ps5-3-a-4.png

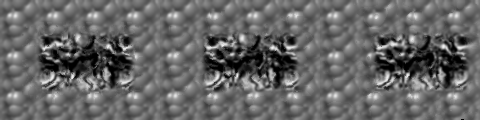
A picture containing outdoor, mammal, dog

Description automatically generated

Ps5-4-a-1.png



Ps5-4-a-2.png



Ps5-4-b-1.png

A picture containing nature

Description automatically generated

Ps5-4-b-2.png

A close-up of the moon

Description automatically generated with medium confidence

Ps5-4-c-1.png

A picture containing grass, tree, dog, outdoor

Description automatically generated

Ps5-4-c-2.png

A picture containing outdoor, mammal, dog

Description automatically generated