**Name : Siddharth Garg**

**Part-1 : Linear Interpolation**

1. Insert your linear interpolated test image(hope.jpg) here:

A picture containing text, person, mammal

Description automatically generated

1. Display the map/plot of all the 3 training images here:

|  |  |  |
| --- | --- | --- |
| Image Name: | Error Map | Demosaiced Image |
| Crayons | Chart, histogram  Description automatically generated |  |
| Iceberg |  |  |
| Tony |  |  |

1. Post close-up of any artifacts you came across.
2. 
3. Average\_per\_pixel error and Max\_pixel\_error for each of  3 training images :

|  |  |  |
| --- | --- | --- |
| Image | Average\_per\_pixel\_error | Max\_pixel\_error |
| Crayons | 16.68 | 255 |
| Tony | 5.40 | 255 |
| Iceberg | 14.86 | 255 |

**Part-2 : Freeman Method**

1. Insert your Freeman Method test image(hope.jpg) here:A picture containing text

   Description automatically generated
2. Display the map/plot of all the 3 training images here:

|  |  |  |
| --- | --- | --- |
| Image Name: | Error Map | Demosaiced Image |
| Crayons |  |  |
| Iceberg |  |  |
| Tony |  |  |

1. Post close-up of any artifacts you came across.
2. Average\_per\_pixel error and Max\_pixel\_error for each of 3 training images :

|  |  |  |
| --- | --- | --- |
| Image | Average\_per\_pixel\_error | Max\_pixel\_error |
| Crayons | 17.23 | 255 |
| Tony | 5.24 | 255 |
| Iceberg | 15.56 | 255 |

**Part-3 : Images of your choice**

1. Post 2 images of your choice here and the corresponding error maps of your outputs with the Freeman method.

|  |  |  |
| --- | --- | --- |
| Original Image | Freeman output | Error Map |
|  |  |  |
|  |  |  |

1. Any image that breaks the method and why do you think so?

**Part-4 : Bonus**

Post any extra credit details/images/references used here.