

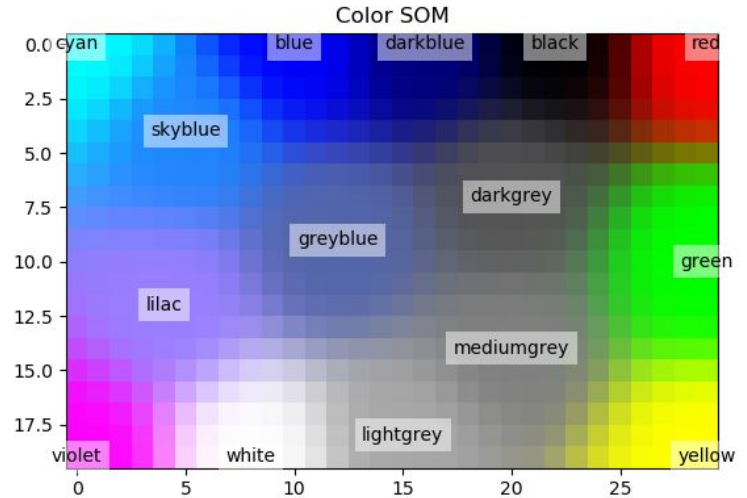
# Corgraph Self Organizing Map Delivrable 1

Tuesday July 10th 2018  
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# SOM Simulator

- “ Maps with Google’s TensorFlow”
- <https://codesachin.wordpress.com/2015/11/28/self-organizing-maps-with-google-tensorflow/>
- Simple to use and well documented
- Takes an N dimensional vector set and goes to a vector set of lower dimensionality



Demo from the program

# Results

- **Input:**

```
training_set = np.array(
```

```
    [[0., 0.],
```

```
    [0., 0.],
```

```
    [0., 0.],
```

```
    [0.125, 1.0],
```

```
    [0.33, 0.4],
```

```
    [0.6, 0.5],
```

```
    [0., 1.],
```

```
    [1., 0.],
```

```
    [1., 1.],
```

```
    [0., 1.],
```

```
    [1., 0.],
```

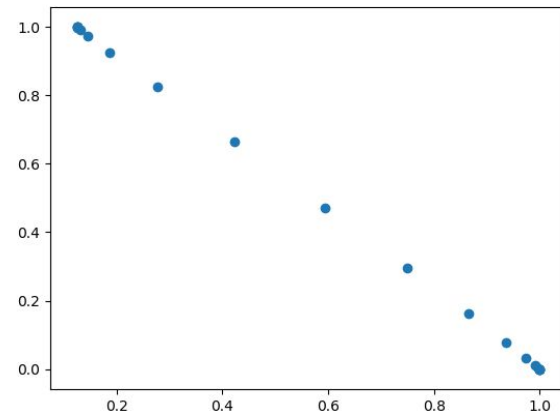
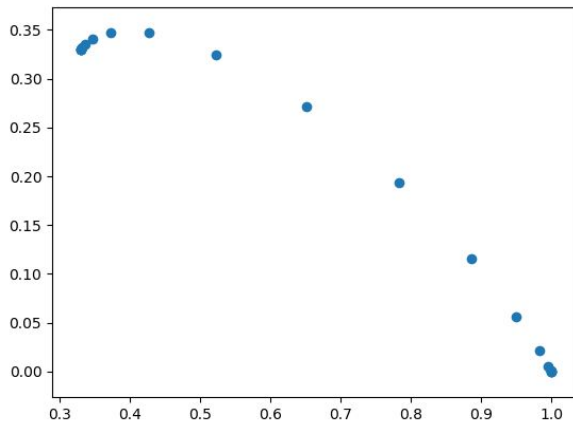
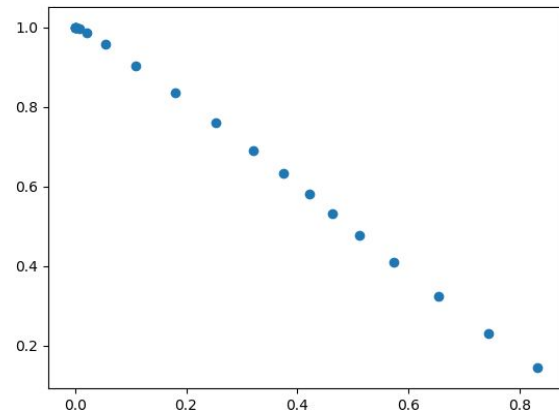
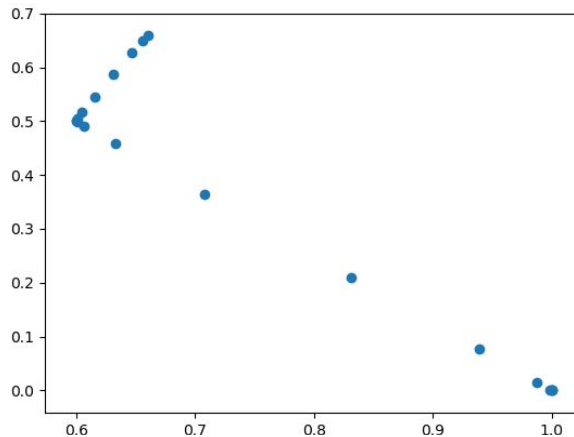
```
    [1., 1.],
```

```
    [.33,.33],
```

```
    [.5, .5],
```

```
    [.66, .66]])
```

**Output**

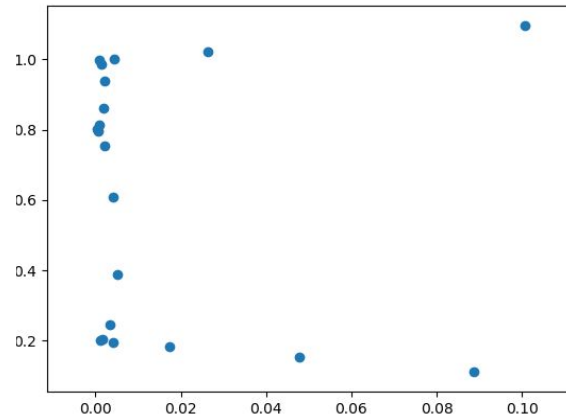
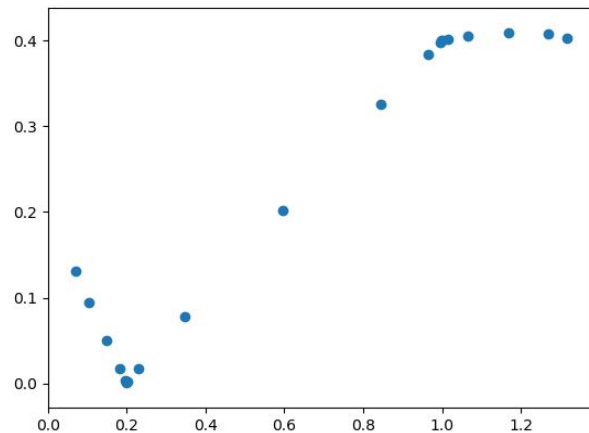
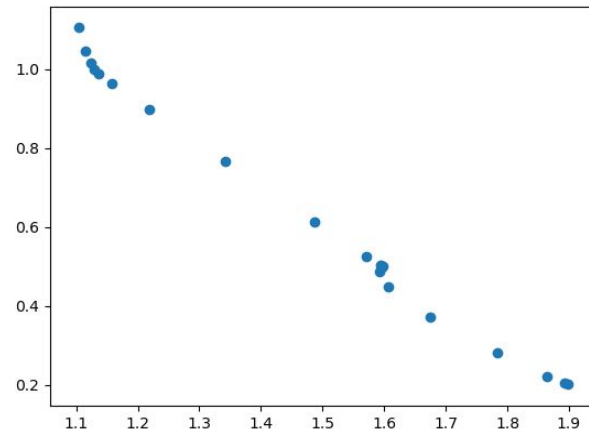
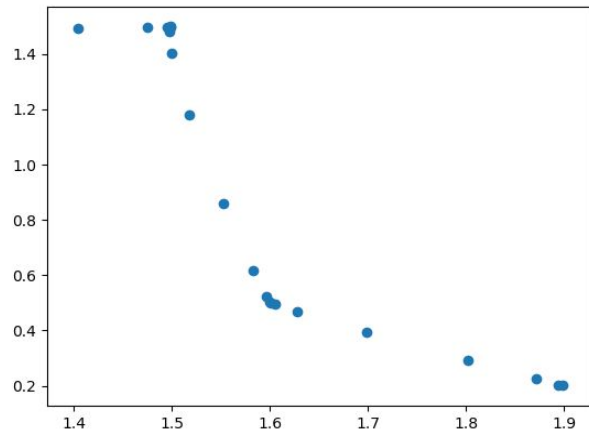


# Results

- Input:

```
training_set = np.array(  
    [[0.2, 0.0],  
     [0.0, 0.8],  
     [1.0, 1.4],  
     [1.125, 1.0],  
     [1.33, 0.4],  
     [1.6, 0.5],  
     [0.0, 1.0],  
     [1., 0.4],  
     [1.9, 0.2],  
     [0.8, 1.7],  
     [0.0, 0.2],  
     [0.2, 0.9],  
     [0.33, 1.33],  
     [1.5, 1.5],  
     [.66, 1.66]])
```

Output



# Next Steps?