k-Means Results: k = 2

**Cluster 1 2 Entropy 0.98 1.013 Purity 0.95 0.06**

MKL Results: Gradient Ascent Variants Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d = (1/2))}

Function Type: Quasi-Concave

**Cluster 1 2 Entropy 0.94 1.03 Purity 0.56 0.48**

Kernels: {(Laplacian RBF, sigma = 1), (Polynomial Kernel, d = 1)} Function Type: Quasi-Concave

**Cluster 1 2 Entropy 1.06 0.85 Purity 0.37 0.63**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=3)}

Function Type: Quasi-Concave

**Cluster 1 2 Entropy 0.60 0.42 Purity 0.63 0.37**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=5)}

Function Type: Quasi-Concave

**Cluster 1 2 Entropy 0.57 0.21 Purity 0.09 0.93**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel,

d=13)} Function Type: Quasi-Concave

**Cluster 1 2 Entropy 1.00 0.99 Purity 0.51 0.52**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=13)

, (Polynomial Kernel, d = 1)} Function Type: Quasi-Concave

**Cluster 1 2 Entropy 1.00 0.97 Purity 0.51 0.53**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=13)

, (Polynomial Kernel, d = 6)} Function Type: Quasi-Concave

**Cluster 1 2 Entropy 0.99 1.00 Purity 0.52 0.51**

Gradient Descent Variants

Kernels: {(Laplacian RBF, sigma = 1), (Polynomial Kernel, d = 2)} Function Type: Quasi-Convex

**Cluster 1 2 Entropy 0.65 0.85 Purity 0.01 1.00**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=4),

(Polynomial Kernel, d = 2)} Function Type: Quasi-Convex

**Cluster 1 2 Entropy 0.34 0.76 Purity 0.87 13**

Kernels: {(Polynomial Kernel, d = 4), (Polynomial Kernel, d = 2)} Function Type: Quasi-Convex

**Cluster 1 2 Entropy 0.33 0.76 Purity 0.86 0.12**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=8),

(Polynomial Kernel, d = 2)} Function Type: Quasi-Convex

**Cluster 1 2 Entropy 1.04 0.92 Purity 0.44 0.57**

Kernels: {(Laplacian RBF, sigma = 1), (Gaussian RBF, sigma = 0.5), (Polynomial Kernel, d=14)

, (Polynomial Kernel, d = 5)} Function Type: Quasi-Convex

**Cluster 1 2 Entropy 0.95 1.00 Purity 0.54 0.46**