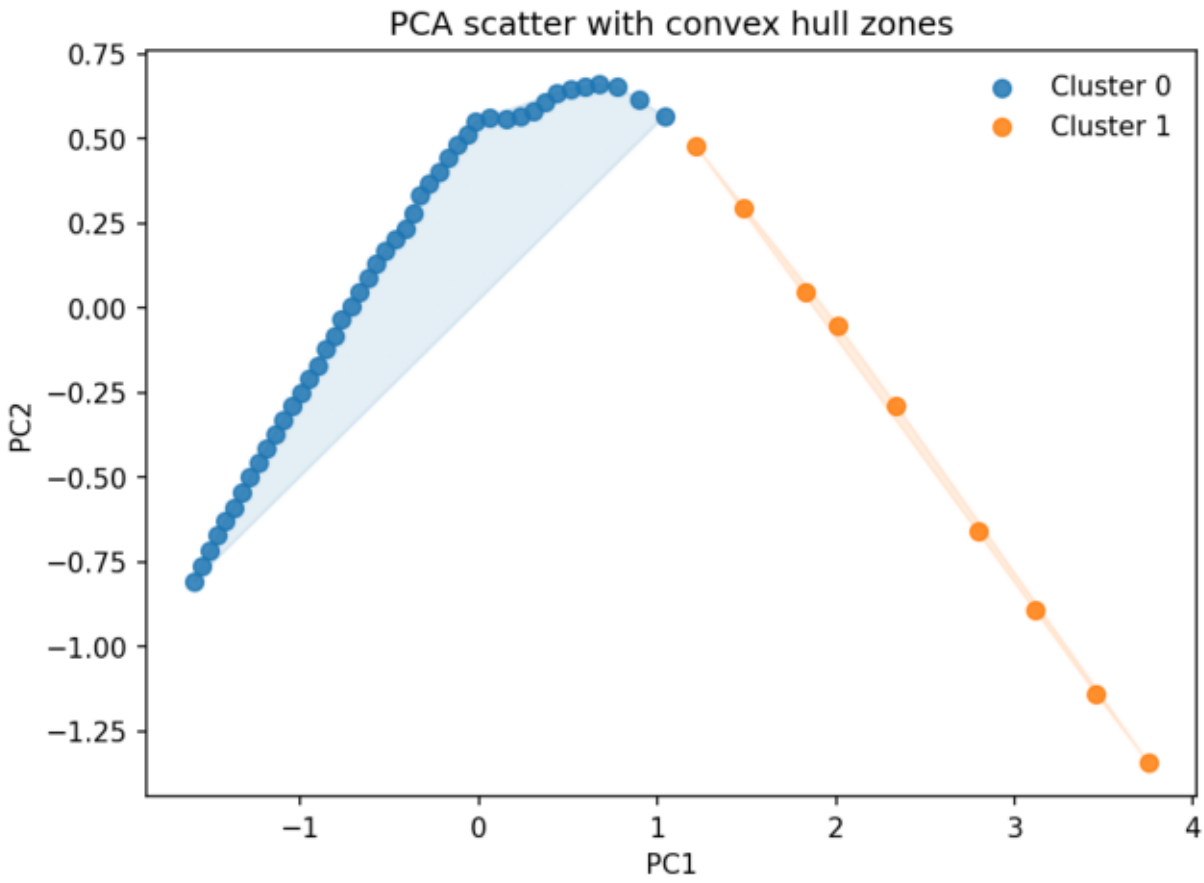
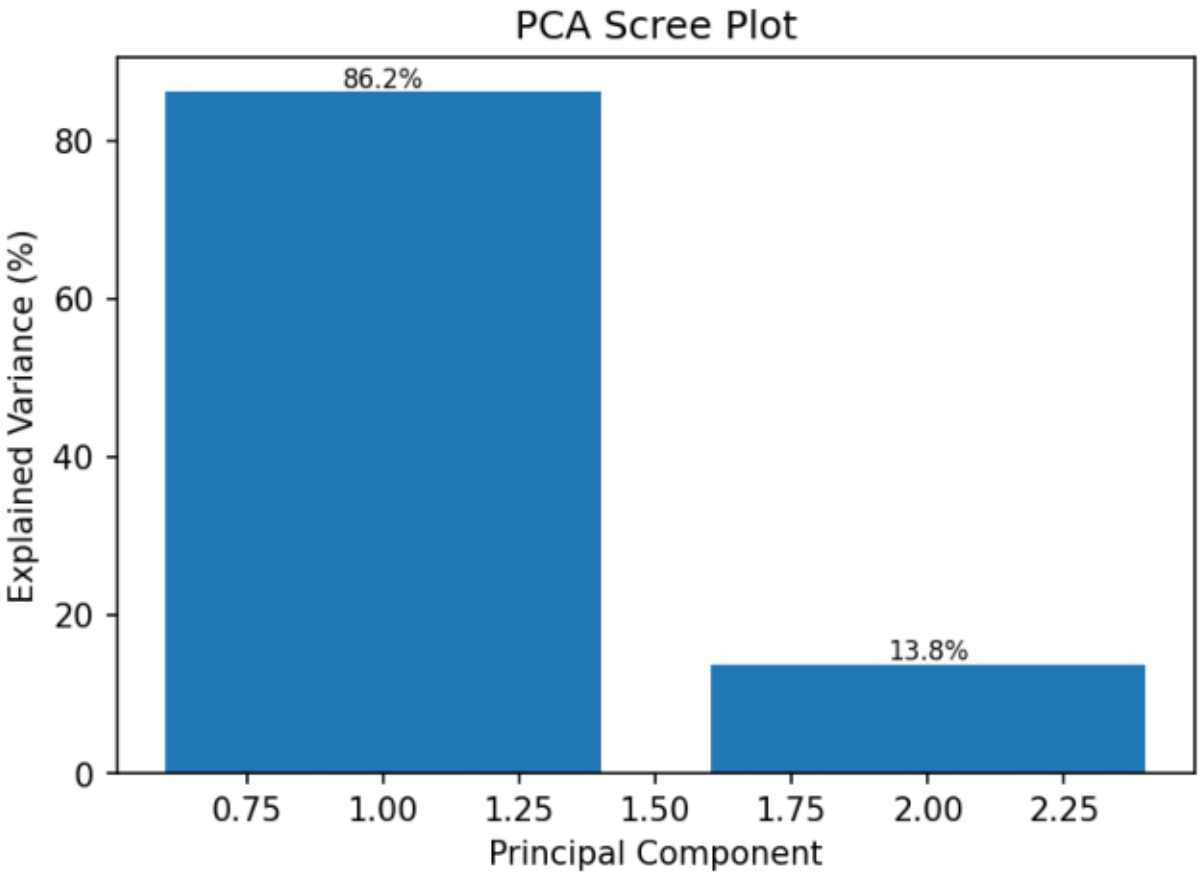
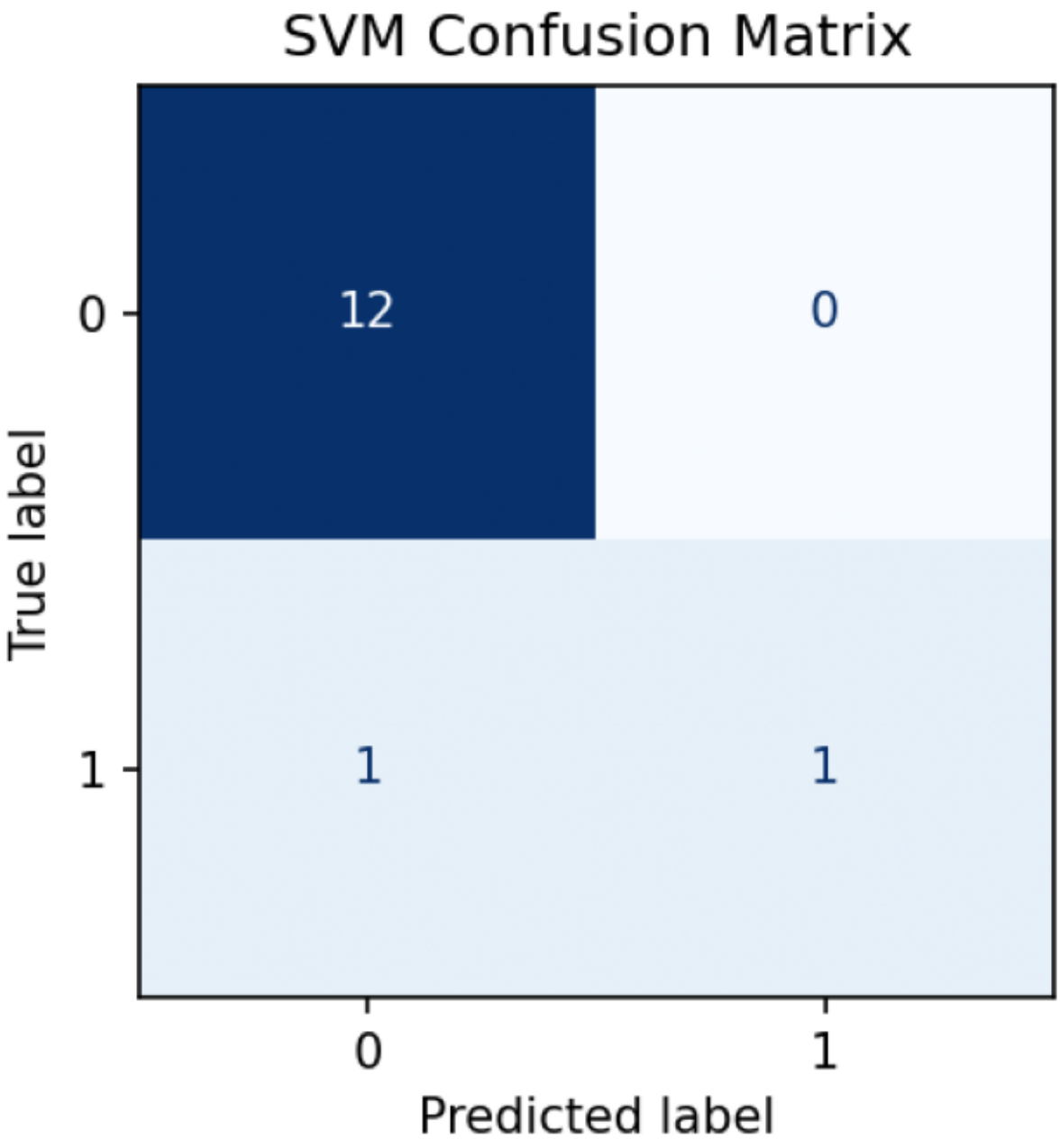
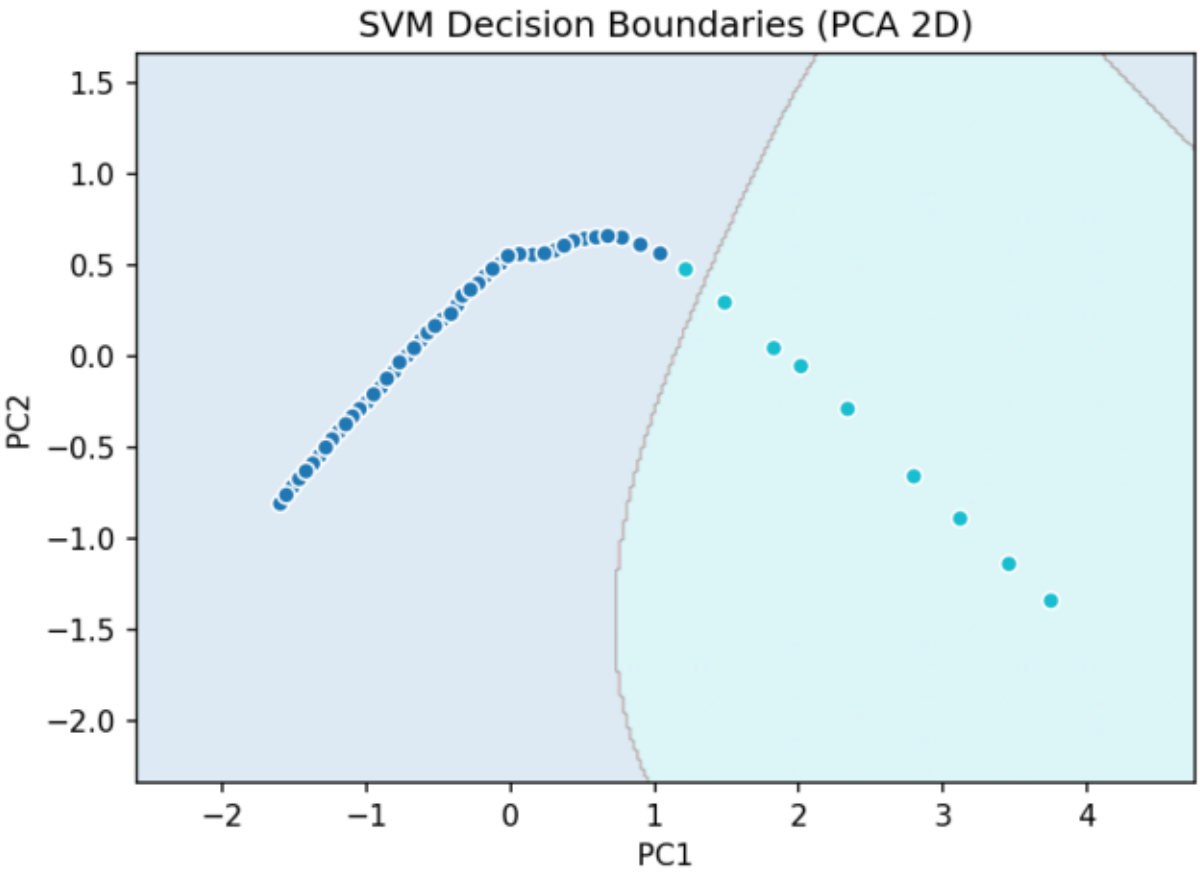
Predix - Clustering Report

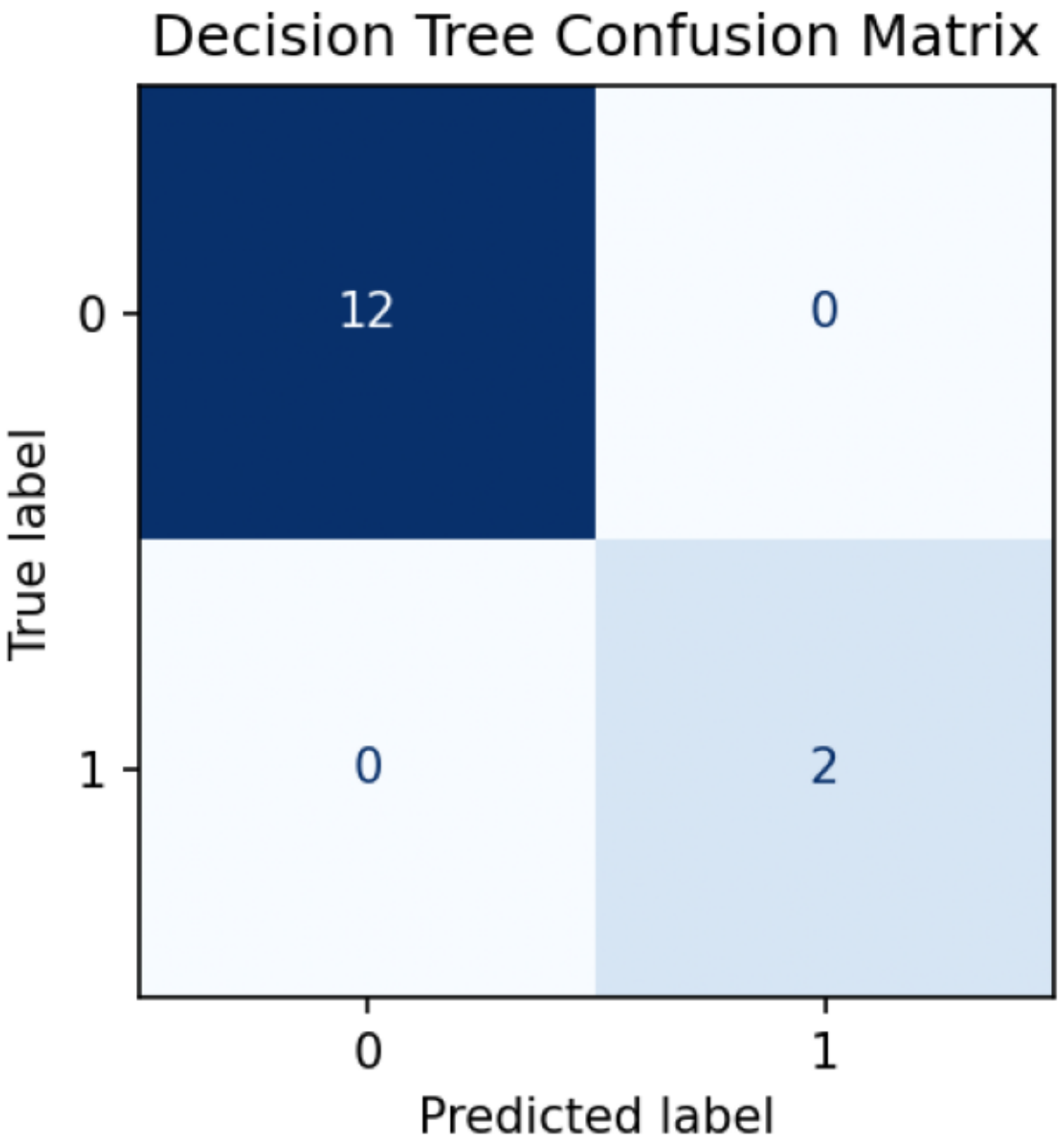
Generated: 2025-11-09T02:17:59.155540

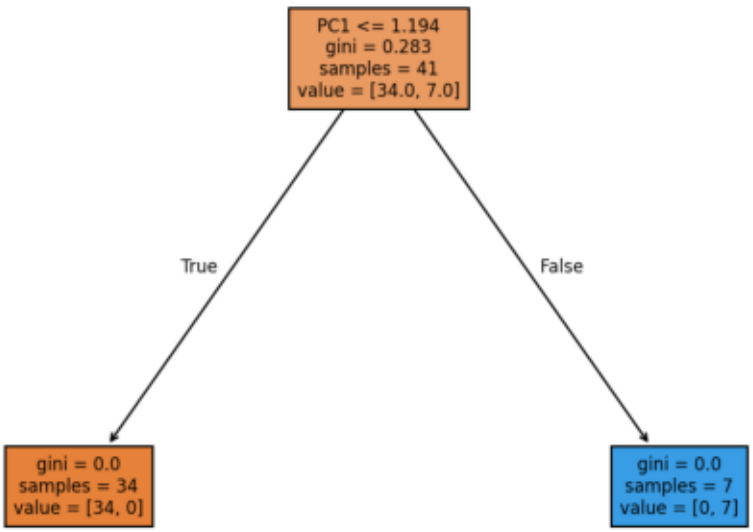

PCA scatter with convex hull zones
Cluster 0
Cluster 1
PC1
PC2
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.25
−1
0
1
2
3
4

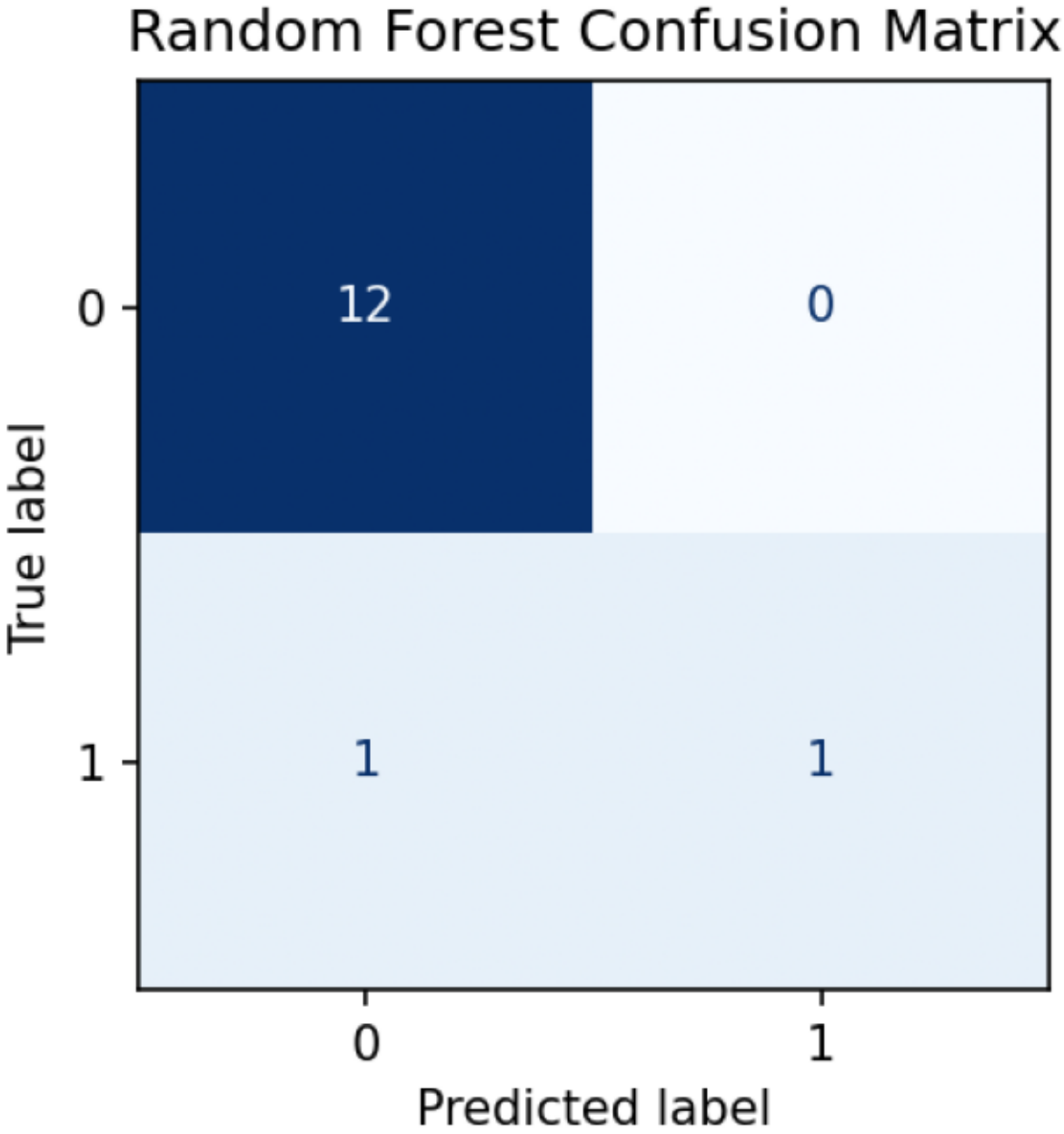

PCA Scree Plot
86.2%
13.8%
Explained Variance (%)
0
20
40
60
80
0.75
1.00
1.25
1.50
1.75
2.00
2.25
Principal Component

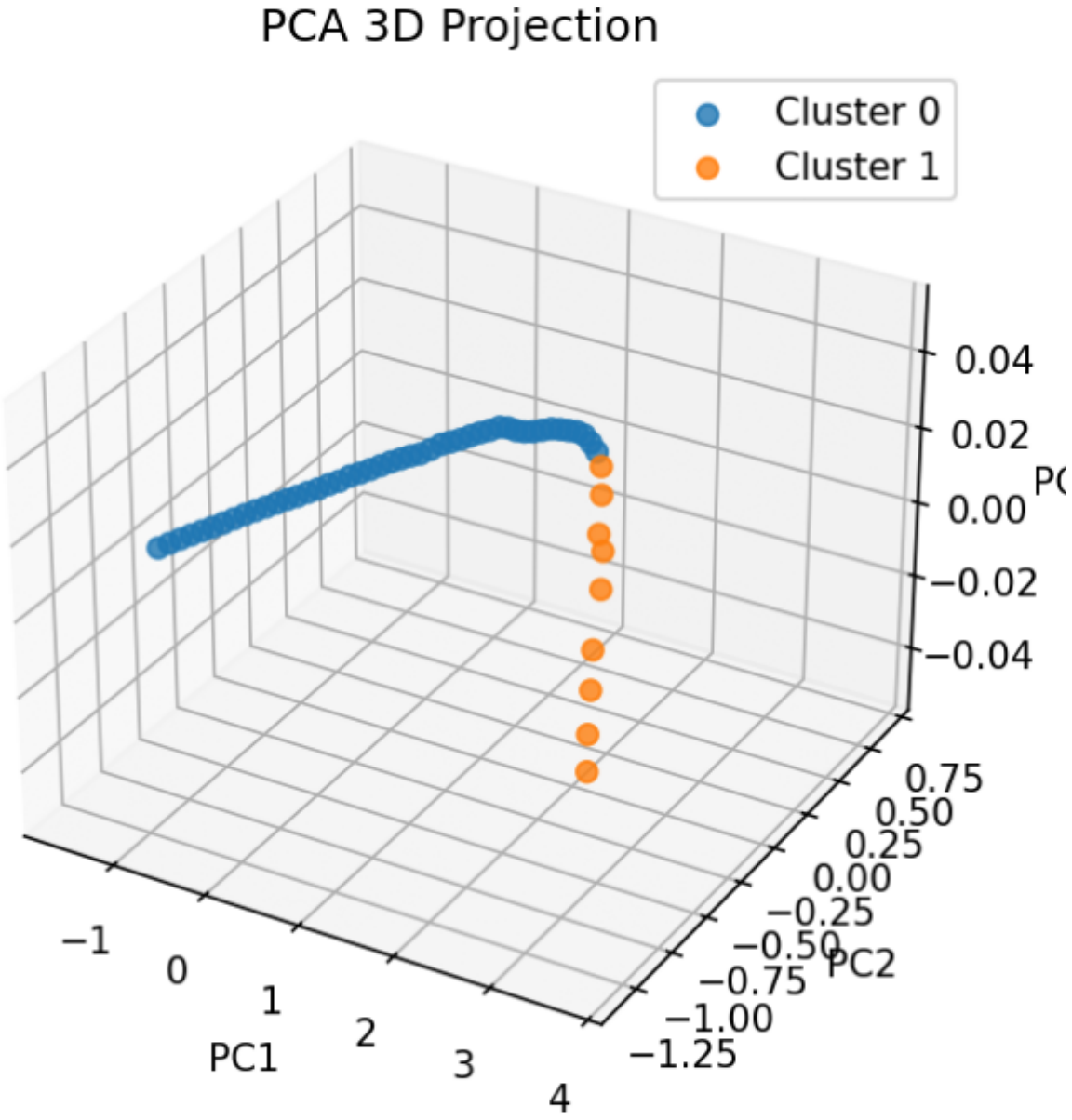

SVM Confusion Matrix
12
0
1
1
0
1
True label
0
1
Predicted label


SVM Decision Boundaries (PCA 2D)
PC1
PC2
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
−2.0
−2
−1
0
1
2
3
4


Decision Tree Confusion Matrix
12
0
0
2
0
1
True label
0
1
Predicted label


Decision Tree Structure
PC1 <= 1.194
gini = 0.283
samples = 41
value = [34.0, 7.0]
True
False
gini = 0.0
samples = 34
value = [34, 0]
gini = 0.0
samples = 7
value = [0, 7]


Random Forest Confusion Matrix
12
0
1
1
0
1
True label
0
1
Predicted label


PCA 3D Projection
Cluster 0
Cluster 1
PC1
PC2
PC
−1
0
1
2
3
4
0.04
0.02
0.00
−0.02
−0.04
0.75
0.50
0.25
0.00
−0.25
−0.50
−0.75
−1.00
−1.25