

K-Means Clustering:

Random Read (Latency):

Silhouette Score for Random Read - latency with 6 Clusters: 0.3528179844647217

Top Cluster for Random Read - latency: Cluster 4

Top-performing Device and Model for Random Read - latency: (np.int64(0), np.int64(124))



Figure 1: KMeans Clustering - Random Read Latency

Figure: KMeans clustering for Random Read Latency data showing top cluster and silhouette score.

Random Read (IOPS):

Silhouette Score for Random Read - iops with 6 Clusters: 0.3481148483040398

Top Cluster for Random Read - iops: Cluster 3

Top-performing Device and Model for Random Read - iops: (np.int64(0), np.int64(22))

Figure: KMeans clustering for Random Read IOPS data showing top cluster and

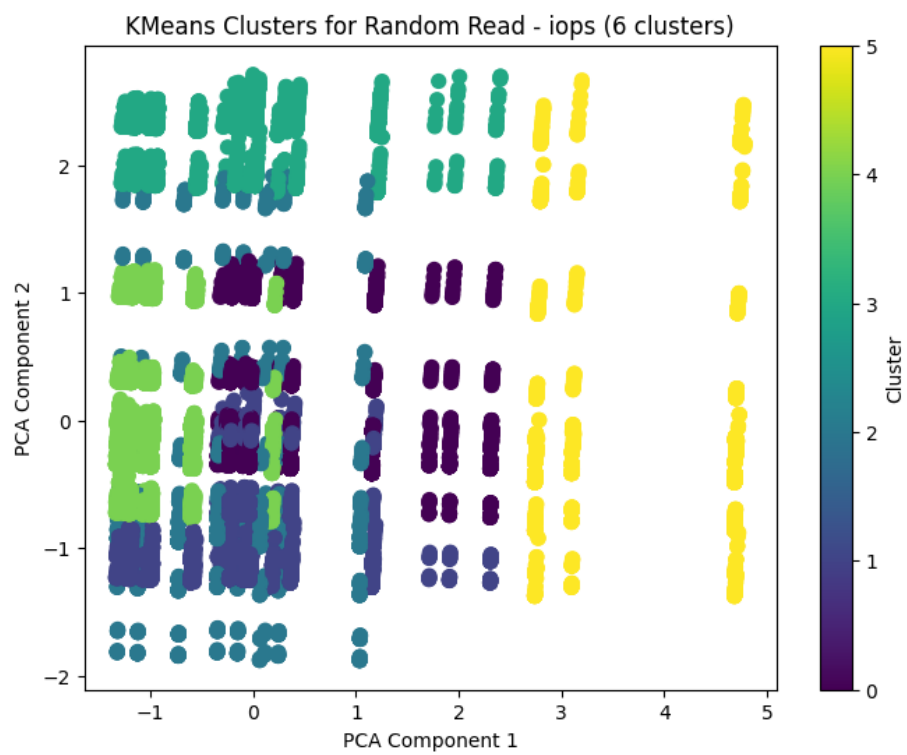


Figure 2: KMeans Clustering - Random Read IOPS

silhouette score.

Random Write Latency

Silhouette Score for Random Write - latency with 6 Clusters: 0.40160844237760196

Top Cluster for Random Write - latency: Cluster 4

Top-performing Device and Model for Random Write - latency: (np.int64(0), np.int64(28))



Figure: KMeans clustering for Random Write Latency data showing top cluster and silhouette score.

Random Write IOPS

Silhouette Score for Random Write - iops with 6 Clusters: 0.3702056885573302

Top Cluster for Random Write - iops: Cluster 1

Top-performing Device and Model for Random Write - iops: (np.int64(0), np.int64(110))

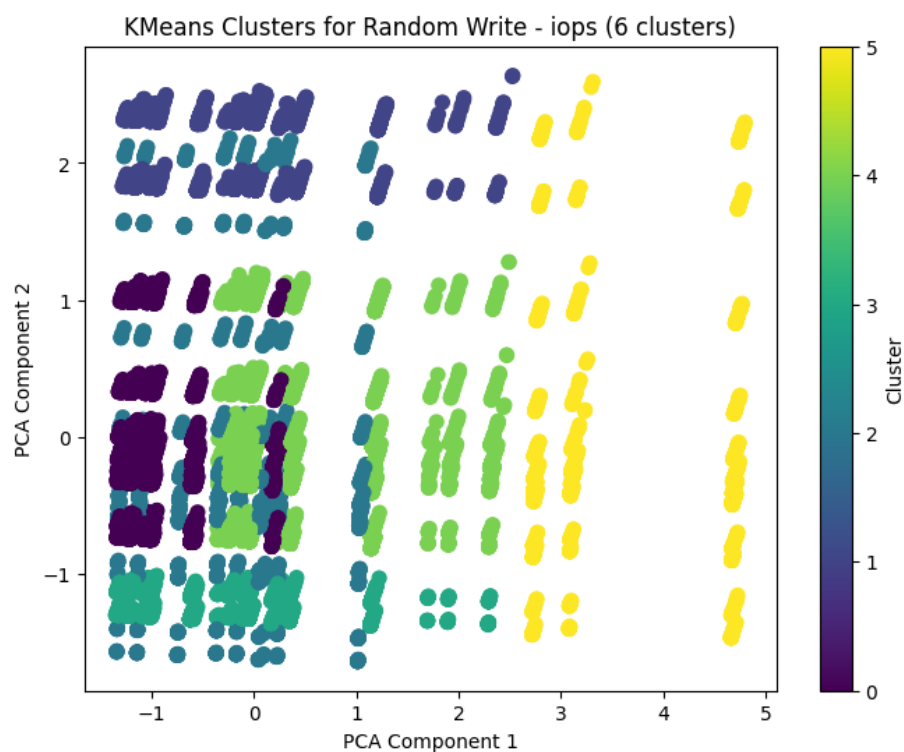


Figure: KMeans clustering for Random Write IOPS data showing top cluster and silhouette score.

Sequential Read Latency

Silhouette Score for Sequential Read - latency with 6 Clusters: 0.33408004965987553

Top Cluster for Sequential Read - latency: Cluster 0

Top-performing Device and Model for Sequential Read - latency: (np.int64(0), np.int64(13))

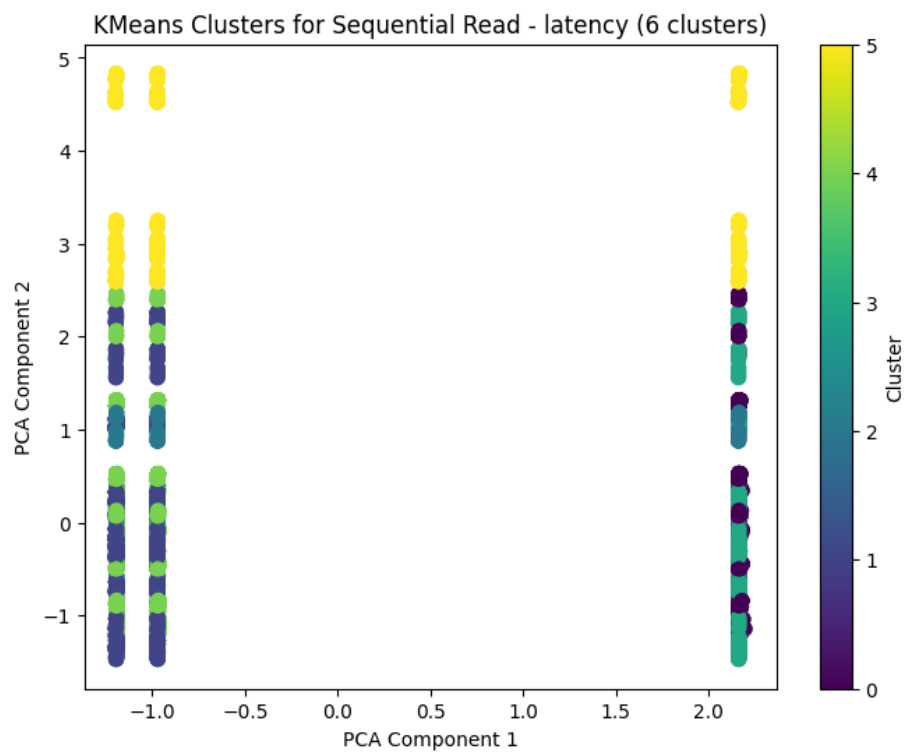


Figure: KMeans clustering for Sequential Read Latency data showing top cluster and silhouette score.

Sequential Read BW

Silhouette Score for Sequential Read - bw with 6 Clusters: 0.30234238726542473
 Top Cluster for Sequential Read - bw: Cluster 2
 Top-performing Device and Model for Sequential Read - bw: (np.int64(0), np.int64(79))

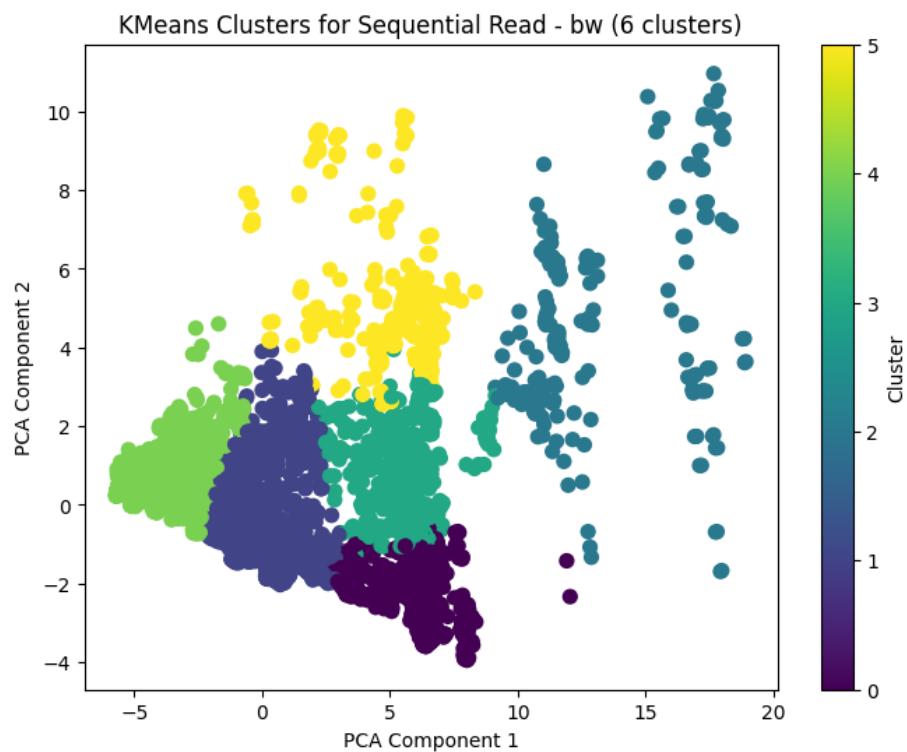


Figure: KMeans clustering for Sequential Read BW data showing top cluster and silhouette score.

Sequential Write Latency

Silhouette Score for Sequential Write - latency with 6 Clusters: 0.28223091888708246
 Top Cluster for Sequential Write - latency: Cluster 0
 Top-performing Device and Model for Sequential Write - latency: (np.int64(0), np.int64(28))

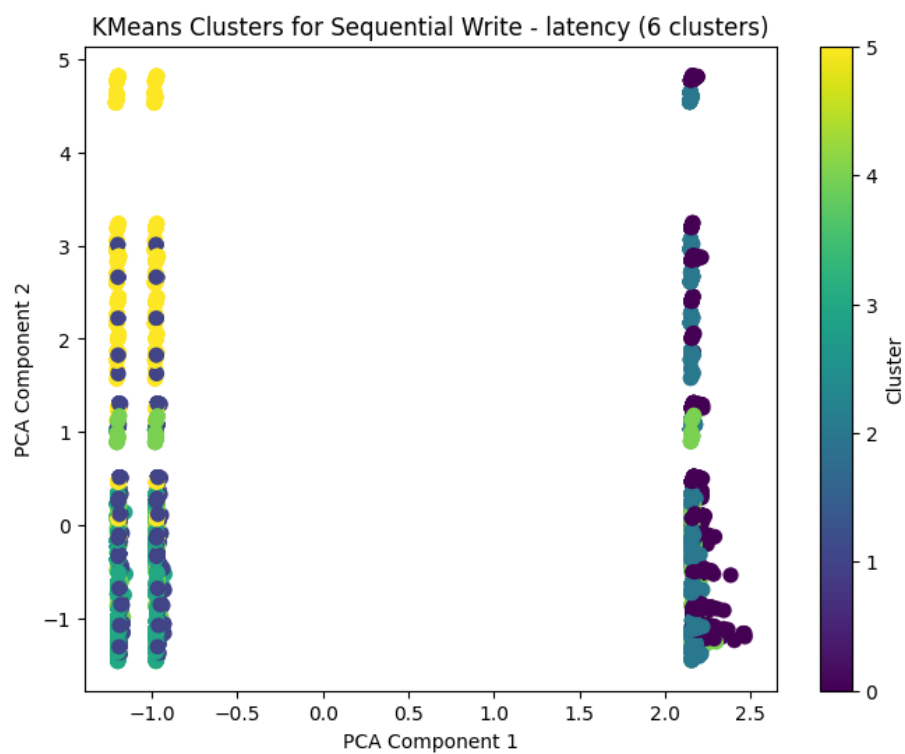


Figure: KMeans clustering for Sequential Write Latency data showing top cluster and silhouette score.

Sequential Write BW

Silhouette Score for Sequential Write - bw with 6 Clusters: 0.22937276421562322
 Top Cluster for Sequential Write - bw: Cluster 0
 Top-performing Device and Model for Sequential Write - bw: (np.int64(0), np.int64(27))

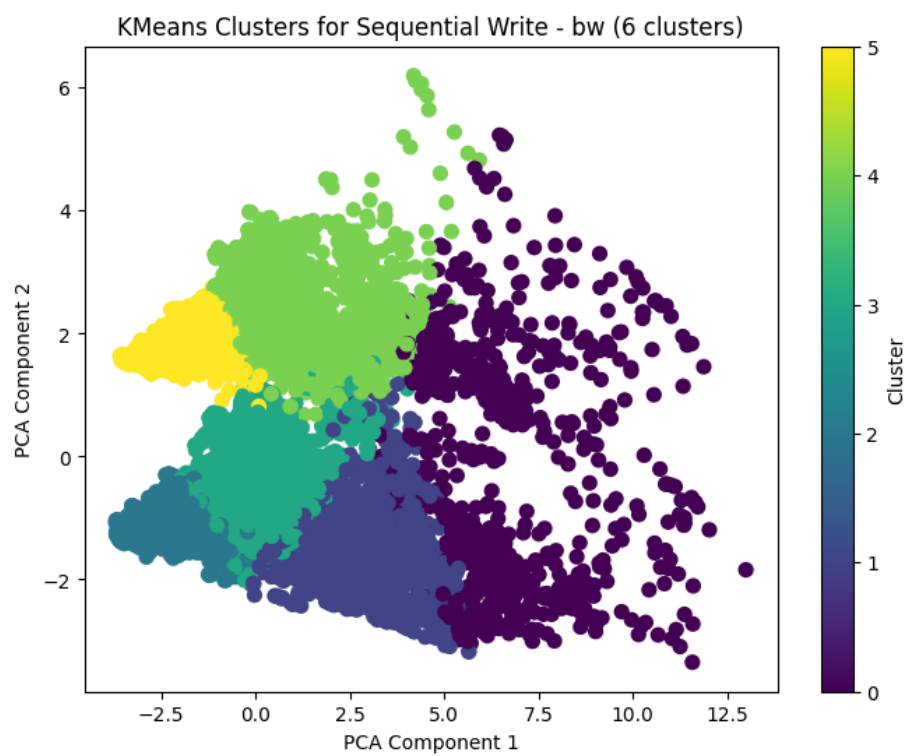


Figure: KMeans clustering for Sequential Write BW data showing top cluster and silhouette score.