OrthoReduce Performance Dashboard

Runtime Performance (Log Scale)
0.0004s
0.0002s
JLL PCA
Runtime (seconds)
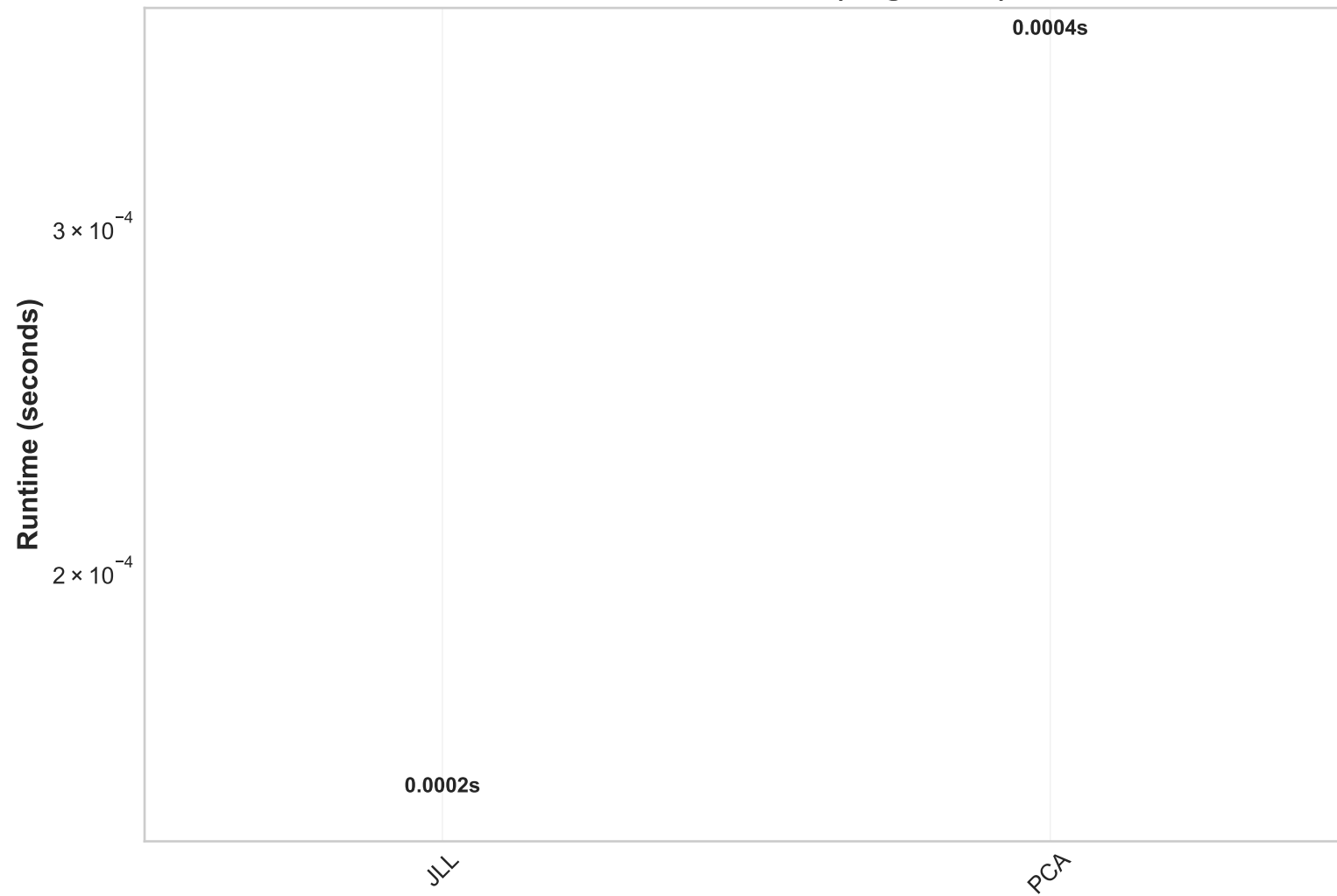
Compression Effectiveness
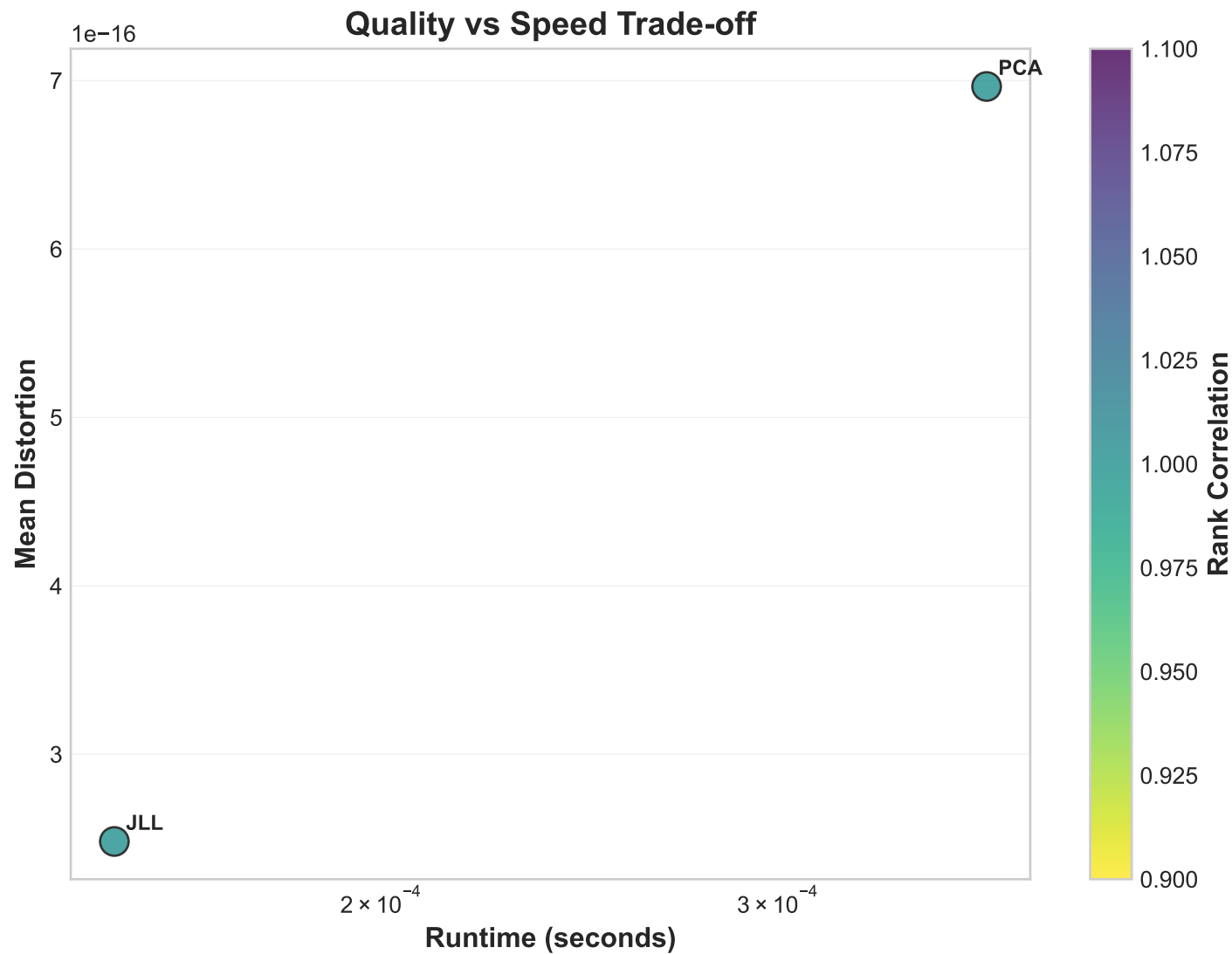1.0x 1.0x
JLL PCA
Compression Ratio (x)
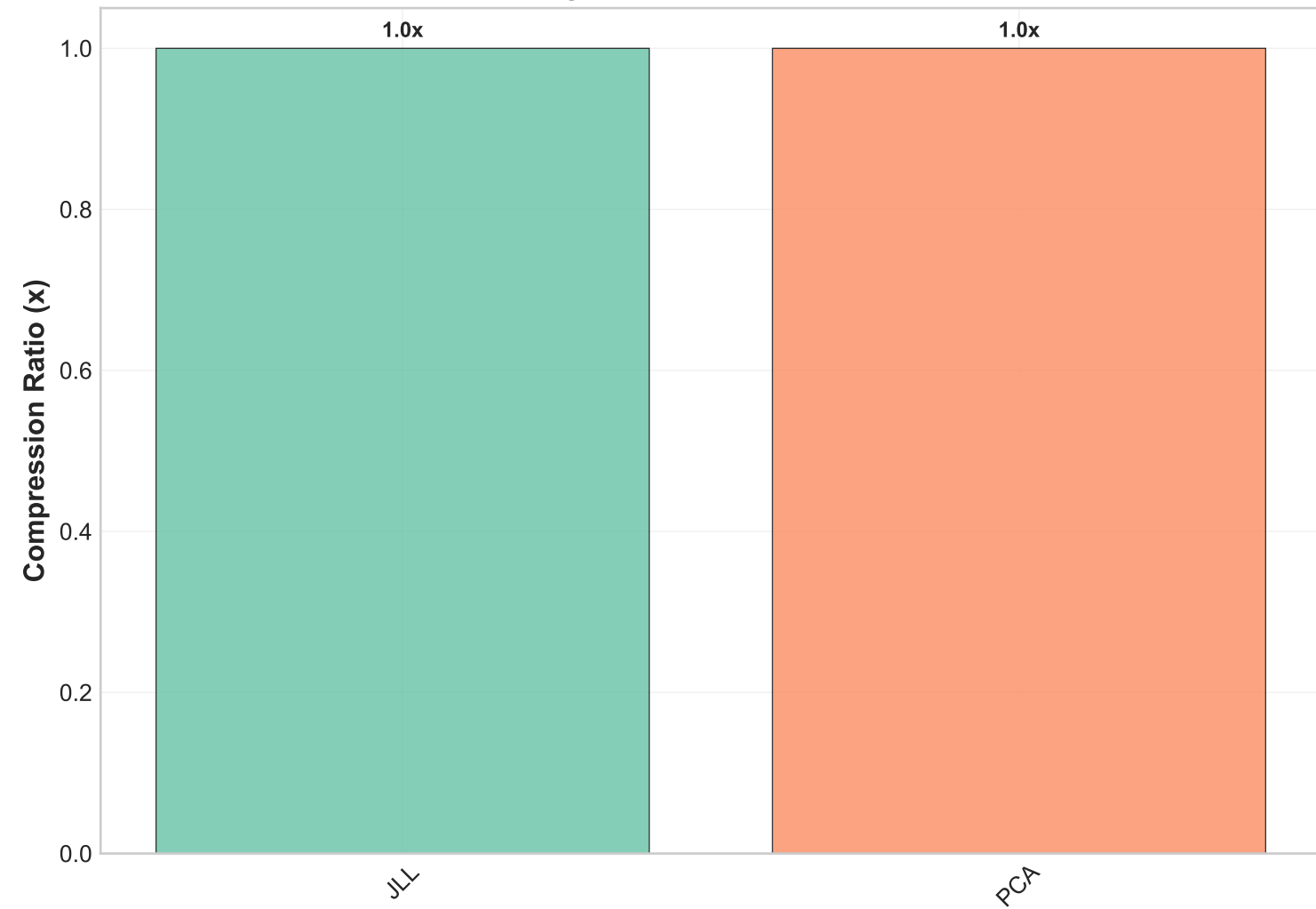
Quality vs Speed Trade-off
PCA
JLL
Runtime (seconds)
Mean Distortion
Rank Correlation

Overall Quality Assessment
JLL PCA
Quality Score (Correlation/Distortion)

Method Comparison Analysis

Quality Analysis: Distortion vs Correlation

JLL

PCA

Excellent (>0.95)
Good (0.9-0.95)
Fair (0.8-0.9)

Mean Distortion (lower is better)

Rank Correlation (higher is better)
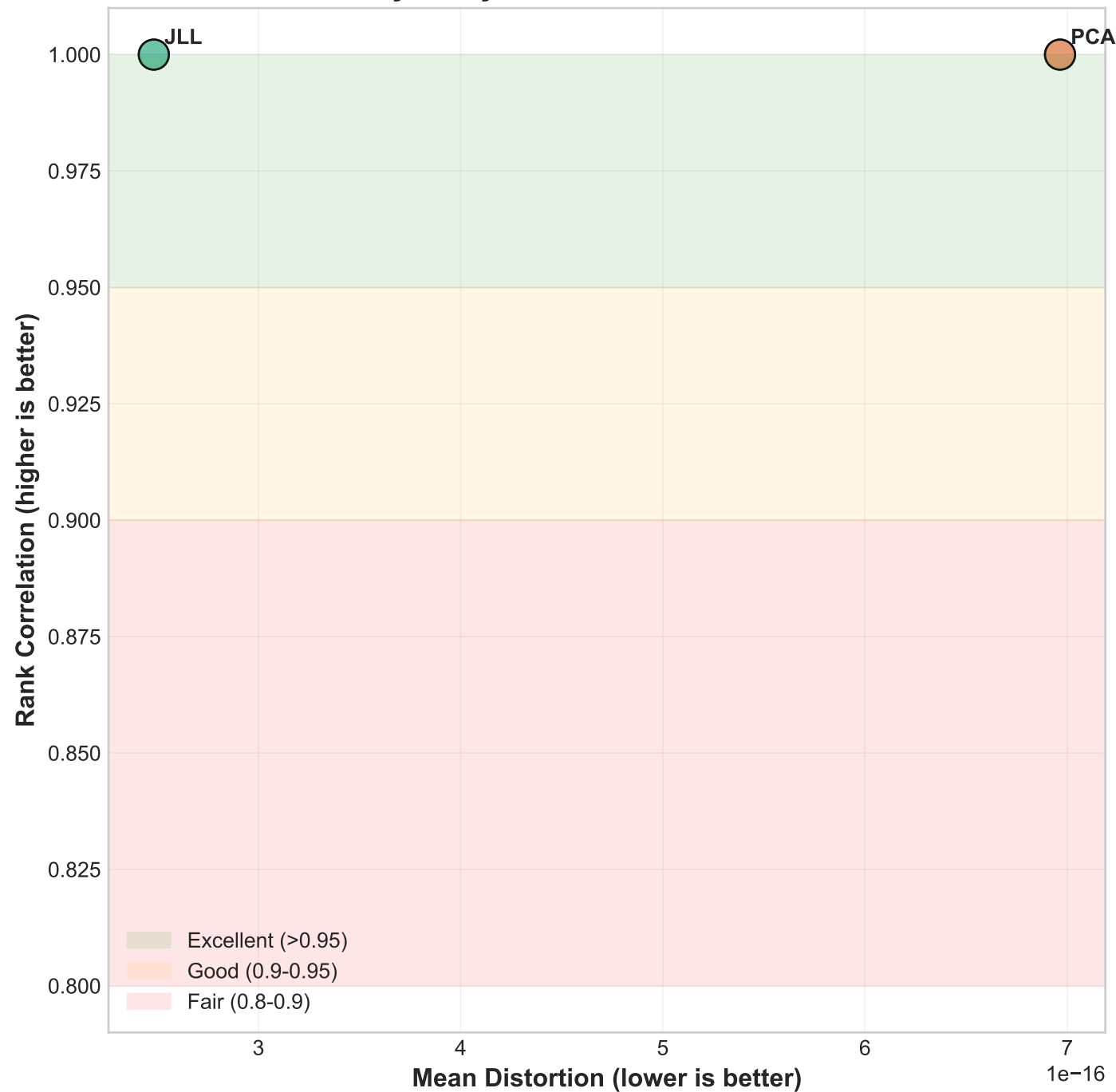
Multi-Metric Performance Radar

Low Distortion

High Compression

High Correlation

Fast Runtime

JLL
PCA
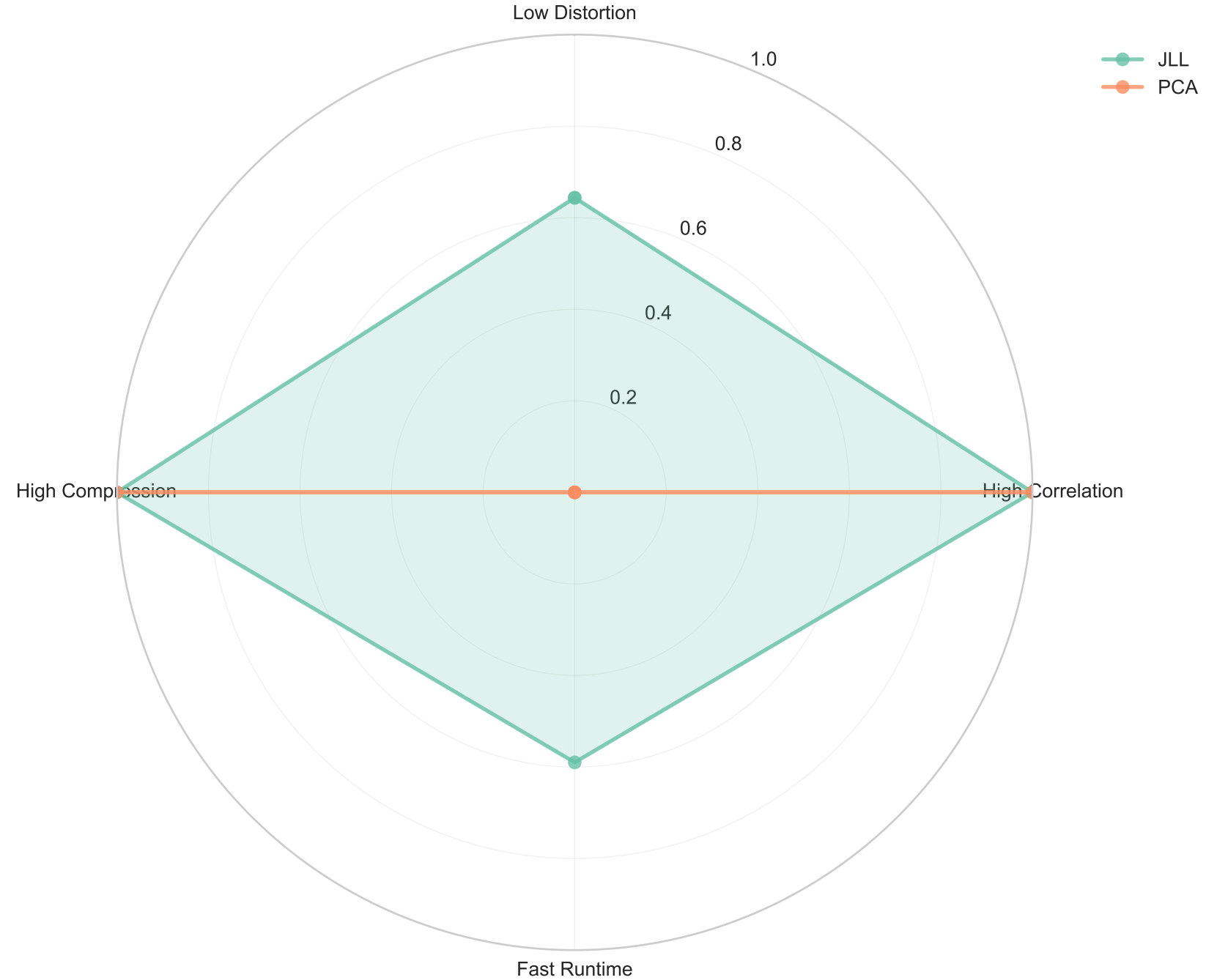
Detailed Results Summary

Method	Runtime	Compression	Mean Distortion	Max Distortion	Rank Correlation	Quality Grade
JLL	0.0002s	1.00x	0.0000	0.0000	1.0000	**EXCELLENT**
PCA	0.0004s	1.00x	0.0000	0.0000	1.0000	**EXCELLENT**

Experiment Configuration:
Dataset: 200 points, 30 dimensions → 30 dimensions
Compression: 1.00x reduction
Epsilon: 0.2
Intrinsic Dimension: 21
Optimization: Adaptive