

Cost-Benefit Analysis: Resource Efficiency vs Accuracy

SVD
(Sequential)

Optimal Point: Maximum Benefit per Resource Unit

Accuracy Benefit (1/RMSE)

- ★ SVD Baseline
- Max Efficiency Line (1 cores)

1.0

0.8

0.6

0.4

0.2

0.0

0.0

2.5

5.0

7.5

10.0

12.5

15.0

17.5

Resource Cost (Cores × Training Time)

12 cores
(8.4, 0.600)

4 cores
(12.0, 0.600)

8 cores
(17.6, 0.600)

Number of Cores

8

7

6

5

4

3

2

1