

1 million records in database from movie Lens

Loops	Smallest DB	Amount of DB's	Distance from quickSVD to SVD	Avg time for quick train	Avg time for full train	Avg time for regular SVD train	Quick RMSE	SVD RMSE	RMSE Diff	quickSVD is better than regular SVD with confidence
3	0.0078125	64	1815.984932	40.66666667	54	53.33333333	0.99090799	0.93598155	0.0549264	0
3	0.015625	22	1296.657746	43.66666667	56	51.66666667	0.960863526	0.93499482	0.0258687	0
3	0.03125	8	831.1943643	40	53	49.75	0.941288731	0.92851764	0.0127711	1.43E-08
3	0.0625	4	672.1314458	38	47.66666667	48.6	0.946088218	0.93338764	0.0127006	0
3	0.1	2	480.2045634	39	45.33333333	48.38888889	0.93388333	0.92577261	0.0081107	3.14E-10

yelp\_training\_set\_review database

Loops	Smallest DB	Amount of DB's	Distance from quickSVD to SVD	Avg time for quick train	Avg time for full train	Avg time for regular SVD train	Quick RMSE	SVD RMSE	RMSE Diff	quickSVD is better than regular SVD with confidence
10	0.00036	2770	6675.108841	7.3	26.2	21.9	1.210150177	1.1412449	0.0689053	0
10	0.0078125	64	4836.689622	15.5	27.8	21.4	1.144414847	1.09167093	0.0527439	9.61E-11
10	0.015625	22	4770.951783	16	27.6	21	1.115750612	1.07039964	0.045351	1.27E-10
10	0.03125	8	3751.249775	18.9	28.2	20.55	1.091248151	1.06271003	0.0285381	1.21E-10
10	0.0625	4	2737.002067	24.3	30.7	20.1	1.090692629	1.0734359	0.0172567	1.44E-10
10	0.1	2	1328.595455	31	33.7	19.66666667	1.088135533	1.07619326	0.0119423	5.32E-11

quick SVD is faster than SVD with confidence

0.967773438