

HOBO Results

Set 25, 2021

Results

Index Type Optimization

Method	index_type	M	efConstruction	ef	recall	query_per_sec	loss
BOHB(Index Type Loop)	'HNSW'	17	445	114	99.68	16782.6	-16777.9
BOHB(Index Type BO)	'HNSW'	22	274	106	99.75	18522	-18517.2

	index_type	nlist	M	nprobe	recall	query_per_sec	loss
Grid Search	'HNSW'	4	158	200	97.11	18331.74	-18329.63

Index Parameters Optimization

IVF_FLAT

	index_type	nlist	nprobe	recall	query_per_sec	loss
BOHB	'IVF_FLAT'	2883	54	99.68	14911	-14906.3
Grid Search	'IVF_FLAT'	14601	101	100.0	14402.03	-14397.03

IVF_SQ8

	index_type	nlist	nprobe	recall	query_per_sec	loss
BOHB	'IVF_SQ8'	8405	46	98.86	13827.5	-13823.7
Grid Search	'IVF_SQ8'	5401	101	99.49	13080.62	-13076.13

IVF_PQ

	index_type	m	nlist	nprobe	recall	query_per_sec	loss
BOHB	'IVF_PQ'	128	3800	205	98.1	1289.00	-1285.90
Grid Search	'IVF_PQ'	64	1	1	95.08	1733.67	-7629.25

HNSW

Method	index_type	M	efConstruction	ef	recall	query_per_sec	loss
BOHB	'HNSW'	18	92	157	99.85	17868.6	-17863.8
Grid Search	'HNSW'	4	158	200	97.11	18331.74	-18329.63