Algorithm	Structure Key (SK)	Structure Value (SV)	State Key (DK)	State Value (DV)
PageRank	vertex id i	out-neighbor set N_i	vertex id i	rank score R_i
Kmeans	point id pid	point value pval	unique key 1	centroids $\{\langle cid, cval \rangle\}$
GIM-V	matrix block id (i, j)	matrix block $m_{i,j}$	vector block id j	vector block v_j