

Model	Space Complexity	# Params	Operations (Time Complexity)
RESCAL	$N_e m + N_r n^2$	1.278M	$(m^2 + N_r n^2)$
TransE	$N_e m + N_r n$	1.202M	$N_e m + N_r n$
TransR	$N_e m + N_r (mn)$	1.278M	$2mn$
ER-MLP	$N_e m + N_r n + ((2m + n) \times h) + h$	1.217M	$(3mh + h)$
NTN	$N_e m + N_r (n^2 s + 2ns + 2s)$	1.523M	$((m^2 + m)s + 2ns + 2s)$
RelNet	$N_e m + N_r n + N_a n^* + ((2m + n) \times h) + h$	1.278M	$((2m + n) \times h) + h$
AttrNet	$N_e m + N_a n^* + 2((m + n^*) \times h) + h$	1.221M	$(2 + k)(m + n^*) \times h + h$
MT-KGNN	$N_e m + N_r n + N_a n^* + ((2m + n) \times h) + 2h + 2((m + n^*) \times h)$	1.237M	$((2 + k)(m + n^*) \times h) + 2h$