Graphs	Dimensions	Walk length	Number of walks	Window size	p	q
$\overline{G_0}$	200	60	10	4	0.978	1.740
$G_{25}$	140	30	16	5	1.125	3.923
$G_{50}$	120	20	32	6	0.368	3.509
$G_{75}$	140	40	16	6	0.358	3.422
$G_{100}$	300	60	10	4	1.799	3.875

 $Supplementary\ table\ 1.\ Optimized\ hyperparameters\ in\ Node 2 vec\ across\ five\ graphs$ 

Graphs	Top1		Top5		Top10		Top50		Top100	
	accuracy	interval								
$G_0$	8.6%	[8.3%, 8.8%]	20.1%	[19.5%, 20.6%]	26.6%	[25.8%, 27.3%]	47.2%	[46.5%, 47.9%]	57.6%	[56.9%, 58.3%]
$G_{25}$	11.2%	[10.6%, 11.8%]	22.7%	[22.4%, 23.0%]	29.3%	[28.9%, 29.8%]	49.6%	[49.3%, 49.9%]	60.1%	[59.8%, 60.4%]
$G_{50}$	12.8%	[12.2%, 13.3%]	26.1%	[25.6%, 26.5%]	32.6%	32.1%, 33.0%]	52.6%	[52.0%, 53.2%]	62.9%	[62.4%, 63.3%]
$G_{75}$	14.3%	[13.8%, 14.9%]	28.1%	[27.4%, 28.8%]	34.9%	[34.6%, 35.3%]	54.7%	[54.2%, 55.1%]	64.4%	[63.9%, 64.9%]
$G_{100}$	14.9%	[14.4%, 15.4%]	28.0%	[27.4%, 28.5%]	34.9%	[34.5%, 35.3%]	54.9%	[54.5%, 55.3%]	65.0%	[64.3%, 65.6%]

Supplementary table 2. Validation accuracy values and 95% confidence intervals during the graph extension. The values and the 95% confidence intervals are computed from 10 repeated embeddings per graph.