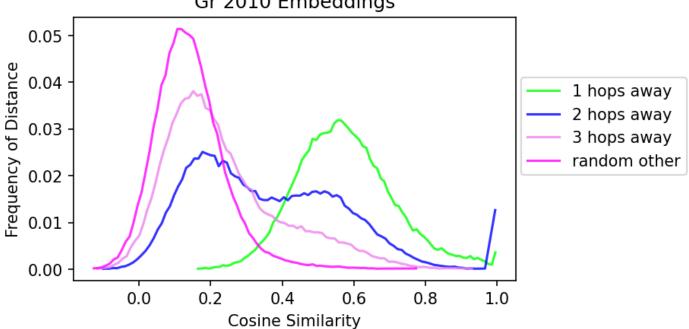
0. Embedding Descriptions/Comparisons

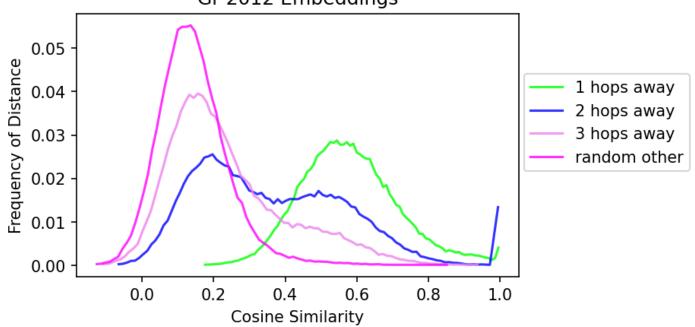
	Gr 2010	Gr 2012	Gr 2014
type	NET	NET NET	
year	2010	2012	2014
n_samples	197761	204636	210530
dimensions	128	128	128

1. Distance Distributions by Hop

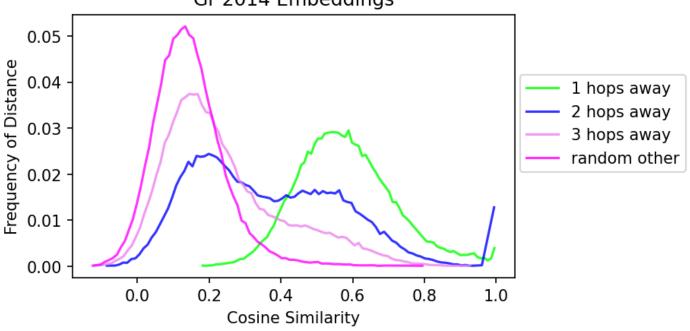
Gron Network Distance Distributions: Gr 2010 Embeddings



Gron Network Distance Distributions: Gr 2012 Embeddings

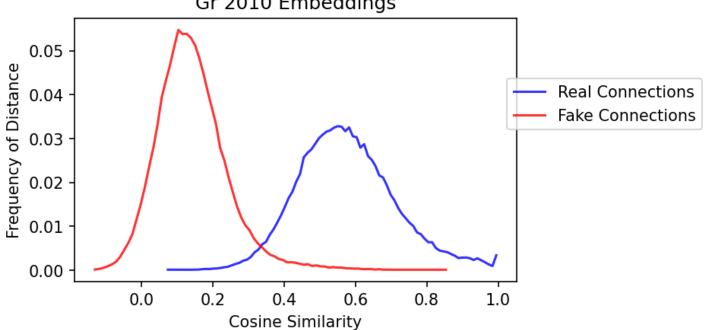


Gron Network Distance Distributions: Gr 2014 Embeddings

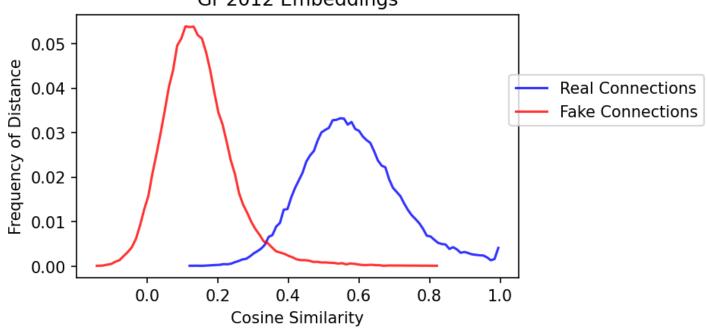


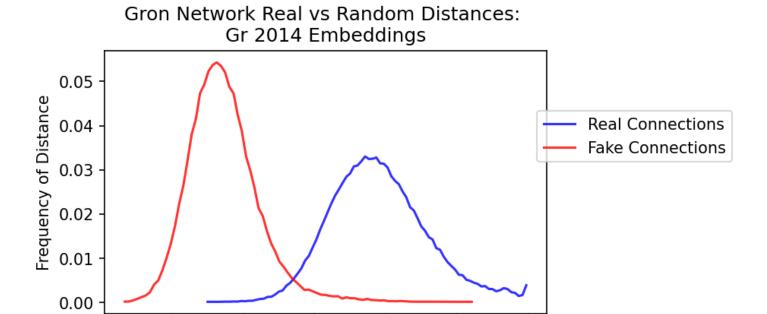
2. Distance Distributions: Real vs Fake Connections

Gron Network Real vs Random Distances: Gr 2010 Embeddings



Gron Network Real vs Random Distances: Gr 2012 Embeddings





0.6

0.8

1.0

0.2

0.0

0.4

Cosine Similarity

3. Prediction - Income at Age 30 (R^2)

	Gr 2010	Gr 2010 + Base	Baseline	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	-0.012	0.047	-0.064	0.062	0.037	0.053	0.063
2012	0.03	0.044	-0.037	0.017	0.101	0.116	0.108
2013	-0.013	0.107	-0.002	-0.05	0.127	0.054	0.181
2014	-0.006	0.107	-0.007	-0.002	0.111	0.045	0.171
2015	0.074	0.114	-0.01	0.025	0.112	0.069	0.188
2016	0.125	0.159	-0.02	0.092	0.146	0.055	0.13
2017	0.107	0.13	-0.009	0.103	0.116	0.096	0.131
2018	0.167	0.153	-0.007	0.141	0.15	0.145	0.176
2019	0.077	0.114	-0.002	0.154	0.113	0.174	0.164
2020	0.133	0.14	-0.002	0.101	0.176	0.142	0.192
2021	0.079	0.154	-0.007	0.066	0.132	0.064	0.107
OVERALL	0.035	0.07	-0.024	0.029	0.074	0.052	0.093

Test Counts

	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	711	640	641	576	564	520
2012	744	685	706	616	606	549
2013	790	735	729	655	654	584
2014	881	828	776	700	739	635
2015	999	951	851	786	785	694
2016	1159	1116	958	893	835	749
2017	1220	1188	1056	1006	903	835
2018	1258	1223	1169	1120	971	906
2019	1246	1210	1282	1227	1094	1030
2020	1178	1149	1375	1326	1265	1205
2021	971	947	1357	1313	1373	1317

OVERALL	11157	10672	10900	10218	9789	9024
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5. Prediction - Marriage (R^2)

5.1 Binary Prediction (Real vs. Fake Pairs)

	Gr 2010	Gr 2010 + Base	Baseline	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	-0.003	-0.022	-0.004	0.004	0.0	-0.005	-0.008
2012	-0.032	-0.011	-0.004	-0.023	0.004	-0.013	-0.018
2013	0.015	0.001	-0.004	0.013	0.015	-0.041	-0.007
2014	-0.023	-0.037	-0.005	-0.04	-0.064	0.007	-0.013
2015	-0.08	-0.02	-0.003	-0.017	-0.038	-0.038	-0.019
2016	-0.049	-0.076	-0.024	-0.029	-0.103	-0.081	-0.111
2017	-0.034	-0.031	-0.005	-0.009	-0.038	-0.111	-0.088
2018	-0.045	-0.083	-0.003	-0.058	-0.052	-0.061	-0.039
2019	-0.074	-0.043	-0.011	-0.064	-0.055	-0.141	-0.086
2020	-0.035	-0.056	-0.007	-0.037	-0.037	-0.01	-0.029
2021	-0.095	-0.093	-0.003	-0.069	-0.143	-0.099	-0.038
OVERALL	-0.034	-0.038	-0.001	-0.03	-0.033	-0.022	-0.026

Test Counts

	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	301	287	310	283	275	245
2012	306	296	339	321	317	283
2013	283	276	280	264	276	248
2014	274	268	287	276	289	275
2015	242	235	256	244	268	254
2016	249	242	256	246	265	253
2017	254	251	268	263	274	264
2018	232	229	249	241	259	253
2019	212	210	248	242	264	258

2020	151	146	176	170	185	178
2021	149	144	185	178	199	189
OVERALL	3174	3083	3418	3250	3426	3214

5.2 Actual Partner Rank vs. Random Pairings

	Gr 2010	Gr 2012	Gr 2014
2011	51.607	51.398	51.668
2012	48.663	49.13	49.051
2013	49.568	49.464	49.578
2014	50.927	50.639	50.106
2015	51.584	51.912	51.63
2016	47.439	47.783	48.07
2017	50.258	50.894	51.415
2018	50.23	51.19	50.426
2019	49.928	49.01	48.232
2020	51.051	51.475	51.021
2021	52.4	51.251	51.461
OVERALL	50.144	50.304	50.13