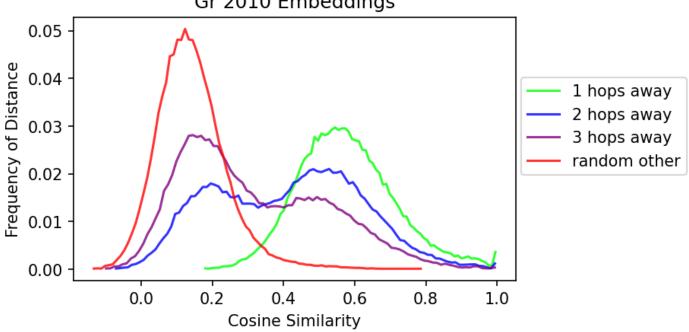
## 0. Embedding Descriptions/Comparisons

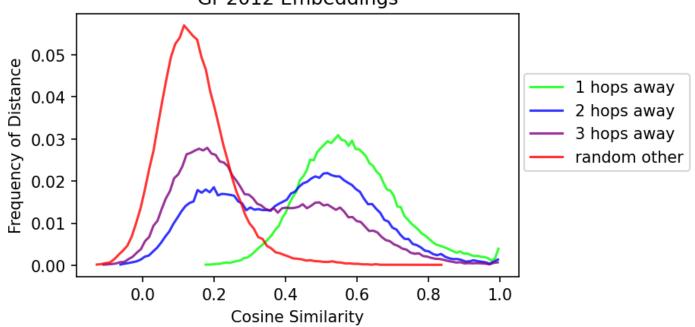
	Gr 2010	Gr 2012	Gr 2014
type	NET	T NET	
year	2010	2012	2014
n_samples	197761	204636	210530
dimensions	128	128	128

## 1. Distance Distributions by Hop

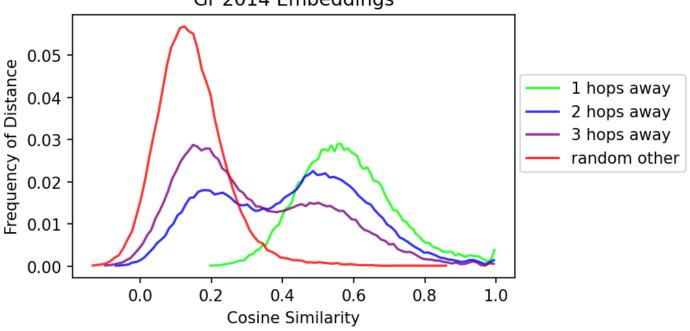
Gron Network Distance Distributions: Gr 2010 Embeddings



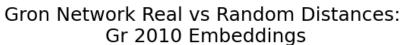
Gron Network Distance Distributions: Gr 2012 Embeddings

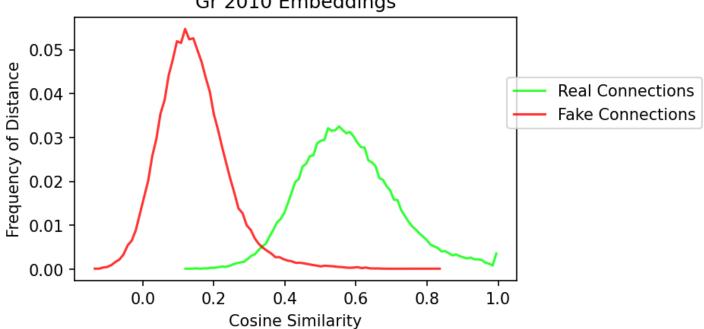


### Gron Network Distance Distributions: Gr 2014 Embeddings

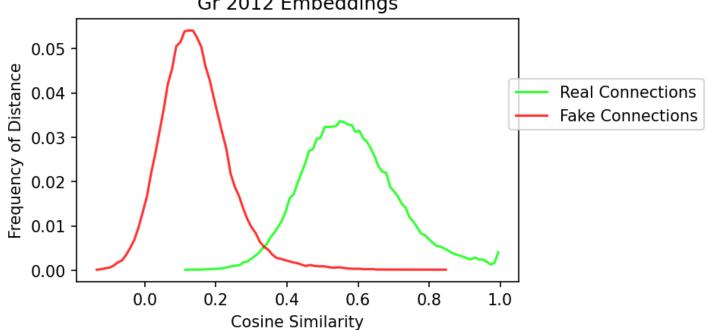


### 2. Distance Distributions: Real vs Fake Connections

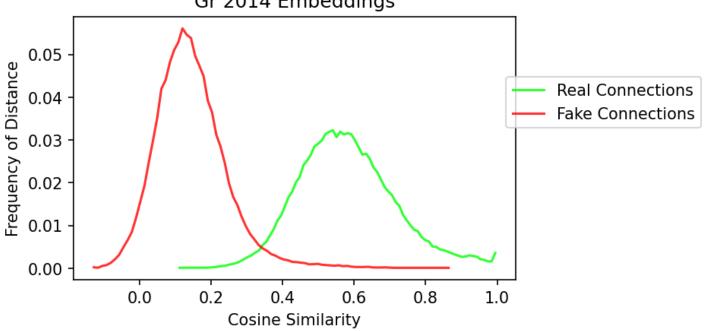




#### Gron Network Real vs Random Distances: Gr 2012 Embeddings



#### Gron Network Real vs Random Distances: Gr 2014 Embeddings



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

	Baseline	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	-0.053	-0.006	0.675	0.005	0.646	0.085	0.625
2012	-0.031	0.003	0.493	0.016	0.551	0.075	0.532
2013	-0.003	-0.023	0.406	-0.063	0.441	0.047	0.471
2014	-0.01	0.023	0.41	0.019	0.472	0.05	0.366
2015	-0.02	0.062	0.315	0.023	0.3	0.064	0.34
2016	-0.018	0.112	0.247	0.077	0.202	0.104	0.183
2017	-0.013	0.133	0.183	0.1	0.125	0.119	0.176
2018	-0.008	0.16	0.148	0.131	0.149	0.145	0.164
2019	-0.004	0.101	0.149	0.099	0.143	0.169	0.161
2020	-0.001	0.123	0.158	0.137	0.183	0.147	0.188
2021	-0.012	0.072	0.177	0.06	0.164	0.041	0.168
OVERALL	0.099	0.035	0.206	0.029	0.205	0.052	0.201

**Test Counts** 

	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	711	635	641	571	564	515
2012	744	679	706	608	606	541
2013	790	725	729	642	654	570
2014	881	817	776	691	739	622
2015	999	937	851	774	785	677
2016	1159	1105	958	884	835	736
2017	1220	1175	1056	995	903	818
2018	1258	1209	1169	1107	971	888
2019	1246	1198	1282	1215	1094	1012
2020	1178	1139	1375	1315	1265	1192
2021	971	939	1357	1302	1373	1303
OVERALL	11157	10558	10900	10104	9789	8874

# 5. Prediction - Marriage (Mean Accuracy)

### 5.1 Binary Prediction (Real vs. Fake Pairs)

	Baseline	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	0.0	0.988	-0.051	0.988	0.0	0.994	0.0
2012	0.0	0.976	-0.088	0.983	-0.113	0.987	0.0
2013	-0.01	0.976	-0.088	0.99	-0.073	0.979	-0.053
2014	-0.002	0.98	-0.116	0.964	-0.116	0.982	-0.063
2015	-0.003	0.959	-0.096	0.973	0.0	0.976	-0.09
2016	-0.003	0.976	-0.226	0.971	-0.079	0.988	-0.133
2017	-0.002	0.975	-0.075	0.979	-0.095	0.982	-0.162
2018	0.0	0.966	-0.16	0.973	-0.073	0.977	0.0
2019	-0.007	0.959	-0.087	0.973	-0.194	0.974	-0.135
2020	-0.016	0.95	-0.121	0.97	-0.007	0.963	-0.067
2021	-0.008	0.959	-0.055	0.978	-0.085	0.982	-0.158
OVERALL	-0.009	0.972	-0.122	0.978	-0.195	0.982	-0.281

**Test Counts** 

	Gr 2010	Gr 2010 + Base	Gr 2012	Gr 2012 + Base	Gr 2014	Gr 2014 + Base
2011	146	37	151	37	134	27
2012	152	56	167	57	157	47
2013	139	61	137	54	136	46
2014	137	64	145	65	144	59
2015	123	66	127	65	135	61
2016	124	69	129	63	133	59
2017	127	69	133	67	136	61
2018	116	70	124	67	129	62
2019	108	67	124	70	132	66
2020	76	42	88	45	92	40
2021	74	38	92	44	98	41
OVERALL	1578	721	1696	718	1700	643

## 5.2 Actual Partner Rank vs. Random Pairings

	Gr 2010	Gr 2012	Gr 2014
2011	5.568	2.488	3.126
2012	4.238	3.268	1.963
2013	4.259	3.766	1.487
2014	6.234	5.152	3.998
2015	6.208	5.55	4.545
2016	6.748	6.939	5.727
2017	7.172	7.528	7.548
2018	9.334	9.416	7.636
2019	11.69	11.485	10.786
2020	17.186	16.249	12.88
2021	19.389	19.395	18.564
OVERALL	7.849	7.558	7.133

#### **Test Counts**

	Gr 2010	Gr 2012	Gr 2014
2011	1466	1522	1354
2012	1498	1662	1560
2013	1384	1374	1358
2014	1334	1404	1416
2015	1182	1248	1320
2016	1208	1254	1302
2017	1226	1304	1344
2018	1128	1208	1258
2019	1032	1204	1292
2020	720	854	902
2021	720	902	972
OVERALL	15442	16696	16792