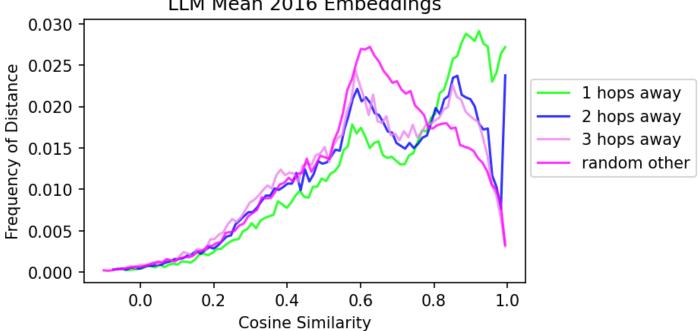
0. Embedding Descriptions/Comparisons

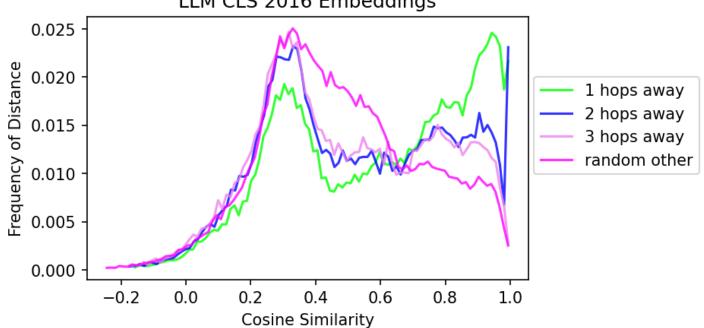
	LLM Mean 2016	LLM CLS 2016
type	LLM	LLM
year	2016	2016
n_samples	304787	304787
dimensions	280	280

1. Distance Distributions by Hop





Full Network Distance Distributions: LLM CLS 2016 Embeddings



2. Distance Distributions: Real vs Fake Connections

0.000

Frequency of Distance

0.000

-0.2

0.0

0.2

0.4

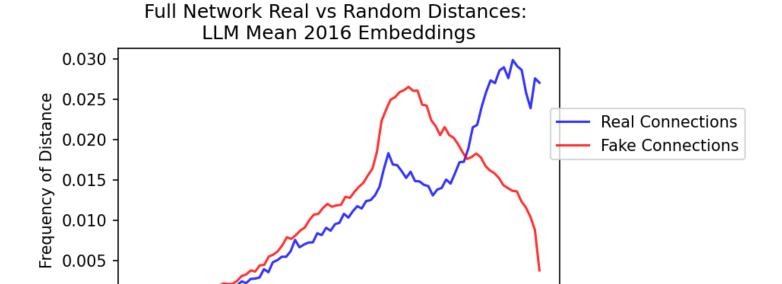
Cosine Similarity

0.0

0.2

0.4

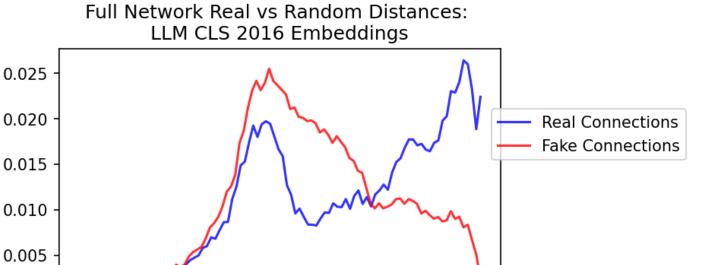
Cosine Similarity



0.6

0.8

1.0



0.6

0.8

1.0

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

	LLM Mean 2016LL	M Mean 2016 + Ba	se Baseline	LLM CLS 2016 L	LM CLS 2016 + Base
2011	0.42	0.414	-0.009	0.435	0.422
2012	0.422	0.466	-0.007	0.433	0.439
2013	0.574	0.606	-0.004	0.542	0.551
2014	0.647	0.632	-0.002	0.496	0.511
2015	0.698	0.701	-0.002	0.609	0.582
2016	0.648	0.646	-0.001	0.527	0.521
2017	0.406	0.517	-0.0	0.301	0.306
2018	0.455	0.432	-0.001	0.336	0.31
2019	0.281	0.376	-0.0	0.262	0.294
2020	0.254	0.235	-0.001	0.196	0.194
2021	0.154	0.158	-0.002	0.124	0.137
OVERALL	0.343	0.336	0.013	0.259	0.285

Test Counts

	LLM Mean 2016	LLM Mean 2016 + Base	LLM CLS 2016	LLM CLS 2016 + Base
2011	879	812	879	812
2012	970	890	970	890
2013	1089	995	1089	995
2014	1253	1137	1253	1137
2015	1424	1301	1424	1301
2016	1602	1469	1602	1469
2017	1706	1589	1706	1589
2018	1787	1667	1787	1667
2019	1869	1751	1869	1751
2020	2005	1893	2005	1893
2021	2018	1915	2018	1915

OVERALL 16602	15419	16602	15419
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5. Prediction - Marriage (R^2)

5.1 Binary Prediction (Real vs. Fake Pairs)

	LLM Mean 2016L	M Mean 2016 + Ba	se Baseline	LLM CLS 2016 L	LM CLS 2016 + Base
2011	0.973	-0.012	-0.005	0.968	-0.032
2012	0.972	-0.017	-0.005	0.971	-0.027
2013	0.976	-0.024	-0.002	0.968	-0.014
2014	0.97	-0.032	-0.004	0.972	-0.03
2015	0.961	-0.05	-0.003	0.97	-0.034
2016	0.97	-0.06	-0.008	0.966	-0.065
2017	0.961	-0.04	-0.004	0.967	-0.047
2018	0.97	-0.044	-0.001	0.965	-0.027
2019	0.965	-0.053	-0.003	0.959	-0.035
2020	0.952	-0.016	-0.007	0.968	-0.046
2021	0.961	-0.032	-0.004	0.957	-0.033
OVERALL	-0.032	-0.032	0.001	-0.027	-0.03

Test Counts

	LLM Mean 2016	LLM Mean 2016 + Base	LLM CLS 2016	LLM CLS 2016 + Base
2011	391	357	391	357
2012	436	402	436	402
2013	400	373	400	373
2014	414	392	414	392
2015	422	402	422	402
2016	433	410	433	410
2017	455	440	455	440
2018	451	439	451	439
2019	444	430	444	430

2020	335	322	335	322
2021	344	324	344	324
OVERALL	5431	5136	5431	5136

5.2 Actual Partner Rank vs. Random Pairings

	LLM Mean 2016	LLM CLS 2016
2011	28.918	27.107
2012	29.754	28.304
2013	31.5	29.596
2014	28.671	27.777
2015	31.089	29.78
2016	30.04	30.498
2017	30.376	30.395
2018	30.13	30.051
2019	30.189	31.254
2020	29.285	29.916
2021	29.932	29.894
OVERALL	29.668	29.216