

Supplementary Material

1 Extracted assessment data: statistics

The following table provides statistics of the extracted assessment data. In our experiments, we use 2012+2013 data as development and 2014 data as evaluation set.

slot	2012			2013			2014		
	+	-	ratio	+	-	ratio	+	-	ratio
per:alternate_names	20	85	0.24	33	244	0.14	3	357	0.01
per:children	109	76	1.43	105	375	0.28	26	452	0.06
per:cities_of_residence	62	361	0.17	64	618	0.1	86	446	0.19
per:statesorprovinces_of_residence	58	74	0.78	32	484	0.07	44	214	0.21
per:countries_of_residence	24	105	0.23	76	383	0.2	62	260	0.24
per:city_of_birth	19	52	0.37	23	97	0.24	14	151	0.09
per:country_of_birth	1	16	0.06	10	100	0.1	7	139	0.05
per:stateorprovince_of_birth	16	27	0.59	13	89	0.15	7	116	0.06
per:city_of_death	26	39	0.67	82	185	0.44	12	161	0.07
per:country_of_death	1	18	0.06	21	141	0.15	8	88	0.09
per:stateorprovince_of_death	25	21	1.19	34	124	0.27	7	109	0.06
per:employee_or_member_of	194	541	0.36	232	1332	0.17	146	732	0.2
per:origin	34	180	0.19	98	372	0.26	89	465	0.19
per:other_family	13	10	1.3	13	299	0.04	14	353	0.04
per:parents	37	59	0.63	34	372	0.09	53	388	0.14
per:schools_attended	62	169	0.37	35	228	0.15	21	239	0.09
per:siblings	31	16	1.94	18	156	0.12	19	320	0.06
per:spouse	64	171	0.37	93	307	0.3	31	470	0.07
per:age	40	26	1.54	145	93	1.56	129	130	0.99
per:date_of_birth	28	32	0.88	27	68	0.4	5	85	0.06
per:date_of_death	29	19	1.53	90	159	0.57	15	102	0.15
per:cause_of_death	54	30	1.8	94	73	1.29	34	69	0.49
per:charges	11	62	0.18	31	86	0.36	66	118	0.56
per:religion	9	17	0.53	6	91	0.07	17	40	0.42
per:title	298	577	0.52	581	1886	0.31	331	1136	0.29
org:alternate_names	62	283	0.22	90	175	0.51	69	180	0.38
org:city_of_headquarters	13	110	0.12	47	169	0.28	38	124	0.31
org:country_of_headquarters	25	83	0.3	74	160	0.46	37	78	0.47
org:stateorprovince_of_headquarters	15	87	0.17	30	105	0.29	23	70	0.33
org:founded_by	13	757	0.02	35	147	0.24	47	306	0.15
org:member_of	3	104	0.03	6	203	0.03	0	177	0.0
org:members	23	79	0.29	42	255	0.16	5	162	0.03
org:parents	21	267	0.08	29	257	0.11	10	246	0.04
org:political_religious_affiliation	14	101	0.14	1	95	0.01	5	31	0.16
org:shareholders	6	366	0.02	18	508	0.04	3	203	0.01
org:subsidiaries	41	339	0.12	49	423	0.12	15	138	0.11
org:top_members_employees	201	1008	0.2	229	619	0.37	169	412	0.41
org:date_dissolved	4	7	0.57	0	85	0.0	2	54	0.04
org:date_founded	17	70	0.24	18	97	0.19	29	79	0.37
org:number_of_employees_members	10	48	0.21	16	39	0.41	9	50	0.18
org:website	13	14	0.93	53	48	1.1	16	5	3.2
total	1746	6506	0.27	2727	11747	0.23	1723	9455	0.18

Table 1: Statistics about extracted data, + denote the number of positive examples, - the number of negative ones