

	TransE_margin5	TransE_margin8	DistMult	TransH_margin8
Embedding Dimension	100	100	50	100
Margin Loss	5	8	8	8
Scoring Function	1	1	-	2
Weighting Soft Constraints	-	-	-	0.1
Learning Rate	0.01	0.01	0.01	0.01
Batch Size	32	32	32	1200
Number of Epochs	1500	1500	2000	3000
Normalization of Entities	2	2	-	-
Filter Negative Triples	yes	yes	yes	yes
<i>Mean Rank</i>	699.56	648.75	1987.49	2378.066
<i>Hits @ k 10</i>	45.7 %	49.98 %	9.43 %	9.37 %

	DistMult_1	DistMult_2	DistMult_3	DistMult_3_f	DistMult_4	DistMult_5	DistMult_5_f
Embedding Dimension	50, <b>100</b>	100, <b>200</b>	<b>200</b> , 300	200	200	200	200
Margin Loss	8	<b>5</b> , 8	3, <b>5</b>	5	5	5, 8, <b>12</b>	12
Learning Rate	<b>0.01</b> , 0.05	<b>0.01</b> , 0.1	0.01, <b>0.03</b>	0.03	0.05, 0.07, 0.1	<b>0.03</b> , 0.05, 0.1	0.03
Batch Size	32	<b>32</b> , 64	32	32	32	256	256
Number of Epochs	<b>1500</b> , 2000	<b>1500</b> , 2000	1500	1500	1500	1500	1500
Number of Iterations	3	3	3	3	3	10	10
Filter Negative Triples	no	no	no	yes	no	no	yes
<i>Mean Rank</i>	2447.68	2033.87	2157.2	2046.72	1972.27	1608.89	2231.11
<i>Hits @ k 10</i>	10.04 %	10.1 %	11.1 %	<b>13.25 %</b>	9.11 %	11.86 %	12.4 %

	TransH_1	TransH_2	TransH_2_f	TransH_3	TransH_4	TransH_4_f	TransH_5	TransH_5_f	TransH_6	TransH_6_f
Embedding Dimension	<b>50</b> , 100	50	50	50	<b>100</b> , 150, 200	100	50, 100, <b>150</b>	150	150, 300, <b>400</b>	400
Margin Loss	8	<b>5</b> , 8	5	5	<b>5</b> , 8, 10, 12	5	5	5	5	5
Scoring Function	1, <b>2</b>	2	2	2	2	2	2	2	2	2
Weighting Soft Constraints	0.1, <b>0.3</b>	0.5, <b>0.7</b>	0.7	0.7, 0.9	0.01, 0.05, <b>0.5</b>	0.5	<b>0.5</b> , 0.7, 0.95	0.5	<b>0.5</b> , 0.7	0.5
Learning Rate	0.01	0.01, <b>0.1</b>	0.1	0.05, 0.1, 0.2	0.01	0.01	0.01, <b>0.1</b> , 0.3	0.1	<b>0.1</b> , 0.4	0.1
Batch Size	32	32, <b>64</b>	64	64, 128	256	256	256	256	256	256
Number of Epochs	1500, <b>2000</b>	2000	2000	2000, 3000	2000	2000	2000	2000	2000	2000
Number of Iterations	3	3	3	3	10	10	10	10	10	10
Filter Negative Triples	no	no	yes	no	no	yes	no	yes	no	yes
<i>Mean Rank</i>	1314.16	940.066	967.45	5827.49	1547.14	1493.54	974.88	985.16	1163.13	1267.32
<i>Hits @ k 10</i>	12.53 %	18.3 %	19.95 %	3.09 %	12.48 %	16.12 %	18.0 %	<b>21.7 %</b>	17.83 %	17.1 %

	TransR_1	TransR_2	TransR_2_f	TransR_3	TransR_3_f	TransR_4	TransR_4_f	TransR_5	TransR_5_f
Embedding Dimension	<b>50</b> , 100	50	50	<b>100</b> , 150, 200	100	50, <b>100</b>	100	100	100
Relations Embedding Dim.	50	50, <b>100</b>	100	50, 100, 150, <b>200</b>	200	100, 200, <b>300</b>	300	300, <b>400</b> , 500	400
Margin Loss	5, 8	8	8	<b>5</b> , 8, <b>10</b> , 12	10	<b>8</b> , <b>10</b> , 16	10	10	10
Scoring Function	2	2	2	2	2	2	2	2	2
Learning Rate	0.01	<b>0.1</b> , 0.01	0.1	0.01, <b>0.1</b>	0.1	0.1, <b>0.3</b> , 0.4	0.3	<b>0.3</b> , 0.4	0.3
Batch Size	32	32, 64	32	256	256	256	256	256	256
Number of Epochs	<b>1500</b> , 2000	1500	1500	2000	2000	<b>2000</b> , 2500	2000	2000	2000
Number of Iterations	32	3	10	10	10	10	10	10	10
Filter Negative Triples	no	no	yes	no	yes	no	yes	no	yes
<i>Mean Rank</i>	1676.65	1430.3	1322.57	1403.8	1344.32	1239.47	1211.72	1258.36	1200.35
<i>Hits @ k 10</i>	13.4 %	19.44 %	23.3 %	18.75 %	24.38 %	22.89 %	27.93 %	23.52 %	<b>28.09 %</b>

	TransE_1	TransE_1_f	TransE_2
Embedding Dimension	<b>100</b> , 150, 200	100	100
Margin Loss	5, 8, 12	8	8
Scoring Function	1	1	1
Learning Rate	0.01, 0.05, <b>0.1</b>	0.1	<b>0.1</b> , 0.3, 0.5
Batch Size	256	256	256
Number of Epochs	<b>1500</b> , 2000	1500	1500
Number of Iterations	10	10	10
Normalization of Entities	2	2	2
Filter Negative Triples	no	yes	no
<i>Mean Rank</i>	693.03	647.42	670.25
<i>Hits @ k 10</i>	44.53 %	<b>50.72 %</b>	44.12 %