知识图谱 (Knowledge Graph)

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1入门学习

1. 大规模知识图谱技术 王昊奋 华东理工大学

[https://wenku.baidu.com/view/3d891bdcf524ccbff021840e.html? sxts=1544106674435]

2. 知识图谱技术原理介绍 王昊奋

[https://wenku.baidu.com/view/de36df590640be1e650e52ea551810a6f524c8c2 .html?from=search]

3. 大规模知识图谱的表示学习及其应用 刘知远

[https://qngw2014.bj.bcebos.com/upload/kg3/KG%202015%20-%20%E5%A4%A7%E8%A7%84%E6%A8%A1%E7%9F%A5%E8%AF%86%E 5%9B%BE%E8%B0%B1%E8%A1%A8%E7%A4%BA%E5%AD%A6%E4%B9 %A0%E7%9A%84%E8%B6%8B%E5%8A%BF%E4%B8%8E%E6%8C%91%E 6%88%98.pdf]

4. 知识图谱的知识表现方法回顾与展望 鲍捷

[https://qngw2014.bj.bcebos.com/upload/kg3/KG%202015%20-%20%E7%9F%A5%E8%AF%86%E5%9B%BE%E8%B0%B1%E7%9A%84%E 7%9F%A5%E8%AF%86%E8%A1%A8%E7%8E%B0%E6%96%B9%E6%B3% 95%E5%9B%9E%E9%A1%BE%E4%B8%8E%E5%B1%95%E6%9C%9B.pdf]

5. 基于翻译模型(Trans系列)的知识表示学习

[http://www.sohu.com/a/116866488 465975]

- 6. TransE算法 (Translating Embedding)
 [http://blog.csdn.net/u011274209/article/details/50991385]
- 7. OpenKE 刘知远 清华大学 知识表示学习(Knowledge Embedding)旨在将知识图谱中实体与关系嵌入到低维向量空间中,有效提升知识计算效率。[http://openke.thunlp.org/]
- 8. 面向大规模知识图谱的表示学习技术 刘知远 [http://www.cbdio.com/BigData/2016-03/03/content_4675344.htm]
- 9. 当知识图谱"遇见"深度学习 肖仰华 [http://caai.cn/index.php? s=/Home/Article/qikandetail/year/2017/month/04.html]
- 10. NLP与知识图谱的对接 白硕 [http://caai.cn/index.php? s=/Home/Article/qikandetail/year/2017/month/04.html]

2 进阶论文

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3 Tutorial

- 1. 知识图谱导论 刘 康 韩先培 [http://cipsupload.bj.bcebos.com/ccks2017/upload/CCKS2017V5.pdf]
- 2. 知识图谱构建 邹 磊 徐波 [http://cips-upload.bj.bcebos.com/ccks2017/upload/zl.pdf]
- 3. 知识获取方法 劳 逆 邱锡鹏 [http://cips-upload.bj.bcebos.com/ccks2017/upload/2017-ccks-Knowledge-Acquisition-.pdf]
- 4. 知识图谱实践 王昊奋 胡芳槐 [http://www.ccks2017.com/?page_id=46]
- 5. 知识图谱学习小组学习
 - 第一期w1:知识提取 第一期w2:知识表示 第一期w3:知识存储 第一期w4:知识检索 [https://github.com/memect/kg-beijing]
- 6. 深度学习与知识图谱 刘知远 韩先培 CCL2016 [http://www.cips-cl.org/static/CCL2016/tutorialpdf/T2A_%E7%9F%A5%E8%AF%86%E5%9B%BE%E8%B0%B1_part3.pdf]

4 综述

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 [http://nlp.csai.tsinghua.edu.cn/~lyk/publications/knowledge_2016.pdf]
- 2. 知识图谱研究进展 漆桂林 2017 [[http://tie.istic.ac.cn/ch/reader/view_abstract.aspx?doi=10.3772/j.issn.2095-915x.2017.01.002]]
- 3. 知识图谱技术综述 徐增林 [http://www.xml-data.org/dzkj-nature/html/201645589.htm]

- 4. 基于表示学习的知识库问答研究进展与展望 刘康 [http://www.aas.net.cn/CN/10.16383/j.aas.2016.c150674]
- Knowledge Graph Refinement: A Survey of Approaches and Evaluation Methods Heiko Paulheim [http://www.semantic-webjournal.net/system/files/swj1167.pdf]

5 视频教程

1. Google 知识图谱系列教程(1-21)[https://www.youtube.com/watch?v=mmQl6VGvX-c&list=PLOU2XLYxmsII2vIhzAyW6eouf62ur2Z2q]

6 代码

- 1. ComplEx @ https://github.com/ttrouill/complex
- 2. EbemKG @ https://github.com/pminervini/ebemkg
- 3. HolE @ https://github.com/mnick/holographic-embeddings
- 4. Inferbeddings @ https://github.com/uclmr/inferbeddings
- 5. KGE-LDA @ https://github.com/yao8839836/KGE-LDA
- 6. KR-EAR @ https://github.com/thunlp/KR-EAR
- 7. mFold @ https://github.com/v-shinc/mFoldEmbedding
- 8. ProjE @ https://github.com/bxshi/ProjE
- 9. RDF2Vec @ http://data.dws.informatik.uni-mannheim.de/rdf2vec/code/
- 10. Resource2Vec @ https://github.com/AKSW/Resource2Vec/tree/master/resource2vec-core
- 11. TranslatingModel @ https://github.com/ZichaoHuang/TranslatingModel
- 12. wiki2vec (for DBpedia only) @ https://github.com/idio/wiki2vec

7 领域专家

- 1. Antoine Bordes [https://research.fb.com/people/bordes-antoine/]
- Estevam Rafael Hruschka Junior (Federal University of Sao Carlos)[http://www.cs.cmu.edu/~estevam/]
- 3. 鲍捷 (Memect) [[http://baojie.org/blog/]]
- 4. 陈华钧 (浙江大学) [http://mypage.zju.edu.cn/huajun]
- 5. 刘知远 (清华大学) [http://nlp.csai.tsinghua.edu.cn/~lzy/]

- 6. 秦兵 (哈尔滨工业大学) [https://m.weibo.cn/u/1880324342? sudaref=login.sina.com.cn&retcode=6102]
- 7. 赵军 (中科院自动化所) http://www.nlpr.ia.ac.cn/cip/jzhao.htm
- 8. 王昊奋 狗尾草智能科技公司 [http://www.gowild.cn/home/ours/index.html]
- 9. 漆桂林 东南大学 [http://cse.seu.edu.cn/people/qgl/index.htm]
- 10. 刘康中科院自动化 [http://people.ucas.ac.cn/~liukang]
- 11. 韩先培 中国科学院软件研究所
 [http://www.icip.org.cn/Homepages/hanxianpei/index.htm]
- 12. 肖仰华 复旦大学 [http://gdm.fudan.edu.cn/GDMWiki/Wiki.jsp? page=Yanghuaxiao]

8 参考资料

1. https://www.zhihu.com/question/52368821/answer/138745422