机器翻译 Machine Translation 专知荟萃

入门学习

1. CIPS青工委学术专栏第9期 | 神经机器翻译 http://www.cipsc.org.cn/qngw/?p=953
2. 基于深度学习的机器翻译研究进展 http://www.caai.cn/index.php?s=/Home/Article/qikandetail/year/2016/month/02.html
3. 35张PPT带你深入浅出认识，深度学习的机器翻译 (也有视频教程)http://mp.weixin.qq.com/s/pnJDuXxw2VI9zEWgNivKdw
4. Kyunghyun Cho对神经机器翻译的介绍 [https://devblogs.nvidia.com/parallelforall/introduction-neural-machine-translation-with-gpus/] [http://devblogs.nvidia.com/parallelforall/introduction-neural-machine-translation-gpus-part-2/] [https://devblogs.nvidia.com/parallelforall/introduction-neural-machine-translation-gpus-part-3/]
5. 神经网络机器翻译Neural Machine Translation(1): Encoder-Decoder Architecture (2): Attention Mechanism [http://blog.csdn.net/u011414416/article/details/51048994] [http://blog.csdn.net/u011414416/article/details/51057789]
6. TensorFlow 神经机器翻译教程 [https://github.com/tensorflow/nmt]
7. AMTA2016上Rico Sennrich的讲习班 http://statmt.org/mtma16/uploads/mtma16-neural.pdf

进阶论文

1997

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2003

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[https://arxiv.org/abs/1409.3215]
3. Cho, K., Van Merriënboer, B., Gulcehre, C., Bahdanau, D., Bougares, F., Schwenk, H., & Bengio, Y. . Learning phrase representations using RNN encoder-decoder for statistical machine translation. arXiv preprint arXiv:1406.1078.
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2016

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1. Facebook：Convolutional Sequence to Sequence Learning Jonas Gehring, Michael Auli, David Grangier, Denis Yarats, Yann N. Dauphin
[https://arxiv.org/abs/1705.03122]
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综述

1. 神经机器翻译前沿进展 清华大学刘洋老师 [http://crad.ict.ac.cn/CN/abstract/abstract3422.shtml]
2. 斯坦福Thang Luong的博士论文 [https://github.com/lmthang/thesis/blob/master/thesis.pdf]
3. Deep Neural Networks in Machine Translation: An Overview [http://www.nlpr.ia.ac.cn/cip/ZongPublications/2015/IEEE-Zhang-8-5.pdf]

Tutorial

1. ACL 2016 Tutorial -- Neural Machine Translation Lmthang在ACL 2016上所做的tutorial [http://nlp.stanford.edu/projects/nmt/Luong-Cho-Manning-NMT-ACL2016-v4.pdf]

2. 神经机器翻译前沿进展 由清华大学的刘洋老师在第十二届全国机器翻译讨论会（2016年8月在乌鲁木齐举办）上做的报告 [http://nlp.csai.tsinghua.edu.cn/~ly/talks/cwmt2016_ly_v3_160826.pptx]
3. CCL2016 | T1B: 深度学习与机器翻译 第十五届全国计算语言学会议（CCL 2016） [http://www.cips-cl.org/static/CCL2016/tutorialsT1B.html]
4. Neural Machine Translation [http://statmt.org/mtma16/uploads/mtma16-neural.pdf]
5. ACL2016上Thang Luong，Kyunghyun Cho和Christopher Manning的讲习班 [https://sites.google.com/site/acl16nmt/]
6. Kyunghyun Cho的talk：New Territory of Machine Translation，主要是讲cho自己所关注的NMT问题 [https://drive.google.com/file/d/0B16RwCMQqrtdRVotWlQ3T2ZXTmM/view]

视频教程

1. cs224d neural machine translation [https://cs224d.stanford.edu/lectures/CS224d-Lecture15.pdf] [https://www.youtube.com/watch?v=IxQtK2SjWWM&index=11&list=PL3FW7Lu3i5Jsnh1rnUwq_TcylNr7EkRe6\]
2. 清华大学刘洋：基于深度学习的机器翻译
   - https://www.bilibili.com/video/av14782824/
   - PPT: http://mp.weixin.qq.com/s/pnJDuXxw2VI9zEWgNivKdw
3. A Practical Guide to Neural Machine Translation [https://www.youtube.com/watch?v=vxibD6VaOfI]

代码

1. seq2seq 实现了谷歌提出的seq2seq模型，基于TensorFlow框架开发。[https://github.com/tensorflow/tensorflow]
2. nmt.matlab 由Stanford的博士Lmthang开源的，代码由Matlab所写。[https://github.com/lmthang/nmt.matlab]
3. GroundHog 实现了基于注意力机制的神经机器翻译模型，由Bengio研究组，基于Theano框架开发。[https://github.com/lisa-groundhog/GroundHog]
4. NMT-Coverage 实现了基于覆盖率的神经机器翻译模型，由华为诺亚方舟实验室李航团队，基于Theano框架开发。 [https://github.com/tuzhaopeng/NMT-Coverage]
5. OpenNMT 由哈佛大学NLP组开源的神经机器翻译工具包，基于Torch框架开发，达到工业级程度。[http://opennmt.net/]
6. EUREKA-MangoNMT 由中科院自动化所的张家俊老师开发，采用C++。[https://github.com/jiajunzhangnlp/EUREKA-MangoNMT]
7. dl4mt-tutorial 基于Theano框架开发。 [https://github.com/nyu-dl/dl4mt-tutorial]

领域专家

1. Université de Montréal： Yoshua Bengio，Dzmitry Bahdanau
2. New York University： KyungHyun Cho
3. Stanford University： Manning，Lmthang
4. Google： Ilya Sutskever，Quoc V.Le

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5. 中科院计算所： 刘群
6. 东北大学： 朱靖波
7. 清华大学： 刘洋
8. 中科院自动化所： 宗成庆，张家俊
9. 苏州大学： 熊德意，张民
10. 华为-诺亚方舟： 李航，涂兆鹏
11. 百度： 王海峰，吴华

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