**南京大学软件学院研究生学位论文中期检查报告格式**

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| **南京大学软件工程硕士学位论文中期检查报告** | | | | | |
| 导师1姓名 | 伏晓 | 研究生姓名  （学号） | 安磊  MF1732001 | 方向 | 软件工程 |
| 导师2姓名 |  |
| 论文题目 | 基于深度学习的信息抽取服务的设计与实现 | | | | |
| 论文选题来源及研究的目的和意义（500字左右）：  随着人工智能的快速发展 | | | | | |
| 该方向的研究现状或技术进展综述（2000字左右） | | | | | |
| 论文的主要技术路线、研究思路和实现方法；相关项目应用前景：（重点说明变更部分）： | | | | | |
| 本人在相关项目中的扮演的角色和承担的工作（重点说明变更部分）：  项目中的两个算法模型都是由我一个人主导并进行开发的，后期的测试与调优也是我一个人完成。 | | | | | |
| 论文的主要工作（500字左右）： | | | | | |
| 实现论文三级大纲： | | | | | |
| 论文和相关项目的当前进度：  项目已完成，论文初稿已完成，正在进行格式修改和内容的修饰。 | | | | | |
| 论文和相关项目进展过程中遇到的困难和问题，以及解决的措施： | | | | | |
| 主要参考文献：  **[MUC-6, 1996] MUC-6, the Sixth in a Series of Message Understanding Conferences, was held in November 1996[OL].**<http://cs.nyu.edu/cs/faculty/grishman/muc6.html> **.**  **[Milleret al., 2000] Miller, Scott, Heidi Fox, Lance Ramshaw, and Ralph Weischedel. “A novel use of statistical parsing to extract information from text.” *In Proceedings of NAACL*, 2000.**  **[Bikel et al., 1999] Bikel D M,Schwarta R,Weischedel R M.An Algorithm that Learns What`s in a Name[J].*Machine Learning Journal Special Issue on Natural Language Learning*, 1999, 34(1-3): 211-231.**  **[Tsai et al., 2004] Tsai T,WU S,Lee C, et al. Mencius: A Chinese Named Entity Recognizer Using the Maximum Entropy based Hybrid Model[J]. *International Journal of Computational Linguistics & Chinese Language Processing*, 2004, 9(1):65-81.**  **[McCallum et al., 2003] McCallum A,Li W.Early Results for Named Entity Recognition with Conditional Random Fields, Features Induction and Web-enhanced Lexicons[C]. *In Proceedings of the 7th Conference on Natural Language Learning at HLT-NAACL*,2003: 188-191.**  **[张祝玉等, 2008] 张祝玉，任飞亮，朱靖波. 基于条件随机场的中文命名实体识别特征比较研究[C]. 见: *第4届全国信息检索与内容安全学术会议论文集*.2008.**  [Wu et al., 2015] Yonghui Wu, Min Jiang, Jianbo Lei,Hua Xu. Named Entity Recognition in Chinese Clinical Text Using Deep Neural Network. Stud Health Technol Inform. 2015;216:624-8.  [Z Huang et al., 2015] Zhiheng Huang, Wei Xu, Kai Yu. Bidirectional LSTM-CRF Models for Sequence Tagging. *arXiv*, 2015, 1508.01991 [cs.CL]  **[Kambhatla, 2004] Kambhatla, Nanda.”Combining lexical, syntactic, and semantic features with maximum entropy models for extracting relations.” *In Proceedings of ACL*, 2004.**  **[Zhao and Grishman, 2005] Zhao, Shubin, and RalphGrishman. Extracting relations with integrated information using kernel methods. *In Proceedings of ACL*, 2005.**  [Culotta et al., 2006] Culotta, Aron, Andrew McCallum, and Jonathan Betz. Integrating probabilistic extraction models and datamining to discover relations and patterns in text. *In Proceedings of HLT-NAACL*, 2006.  [Mintz et al., 2009] Mintz, Mike, Steven Bill, RionSnow, and Dan Jurafsky. Distant supervision for relation extraction without labeled data. *In Proceedings of ACL-IJCNLP*, 2009.  [Socher et al. 2012] Socher , Richard, et al. Semantic compositionality through recursive matrix-vectorspaces. *In Proceedings of EMNLP-CoNLL*, 2012.  [Zeng et al., 2014] Daojian Zeng, Kang Liu, et al. Relation classification via Convolutional Deep Neural Network. *In Proceedings of COLING*, 2014  [Santos et al., 2015] Cicero Nogueira dos Santos, Bing Xiang, Bowen Zhou. Classifying Relations by Ranking with Convolutional Neural Networks. *In Proceedings of ACL*, 2015.  [Miwa er al., 2016] Makoto Miwa, Mohit Bansal. End-to-End Relation Extraction using LSTMs on Sequences and Tree Structures. *In Proceedings of ACL*, 2016.  [Lin et al., 2016] Yankai Lin, Shiqi Shen, Zhiyuan Liu, et al. Neural Relation Extraction with Selective Attention over Instances. *In Proceedings of ACL*, 2016.  [Bengio et al., 2002] Bengio Y, Simard P, Frasconi P. Learning long-term dependencies with gradient descent is difficult[J]. *IEEE Trans Neural Netw*, 2002, 5(2):157-166.  [Hinton, 1986] Hinton G E. Learning distributed representations of concepts[C]. *Eighth Conference of the Cognitive Science Society*. 1986.  [Harris, 1954] Harris Z S.Distributional structure[J]. *Word*, 1954, 10(2-3): 146-162.  [Pennington et al., 2014] Jeffrey Pennington, Richard Socher, and Christopher D. GloVe: Global Vectors for Word Representation. *Manning*. 2014.  [Bengio et al., 2006] Bengio Y, Ducharme R, Vincent P, et al. A neural probabilistic language model[J]. *Journal of Machine Learning Research*, 2006, 3(6):1137-1155.  [Mikolov et al., 2013a] Mikolov T, Chen K, Corrado G, et al. Efficient Estimation of Word Representations in Vector Space[J]. *Computer Science*, 2013.  [Mikolov et al., 2013b] Mikolov T, Sutskever I, Chen K, et al. Distributed representations of words and phrases and their compositionality[C]. *International Conference on Neural Information Processing Systems*. Curran Associates Inc. 2013:3111-3119.  [Radford et al., 2017] Radford A, Jozefowicz R, Sutskever I. Learning to Generate Reviews and Discovering Sentiment[J]. 2017.  [Rumelhart et al., 1986] David E. Rumelhart, Geoffrey E. Hinton & Ronald J. Williams. Learning representations by back-propagating errors[J]. *Nature*, 1986, 323(3):533-536.  [Hochreiter et al., 1997] Hochreiter S, Schmidhuber J. Long short-term memory[J]. *Neural computation*, 1997, 9(8):1735-1780.  [He K M et al., 2015] Kaiming He, Xiangyu Zhang, Shaoqing Ren, et al. Deep Residual Learning for Image Recognition[J]. *arXiv*, 2015, 1512.03385.  **[Hinton et al., 2012]** Hinton G E, Srivastava N, Krizhevsky A, et al. Improving neural networks by preventing co-adaptation of feature detectors[J]. *arXiv preprint arXiv*:1207.0580, 2012. | | | | | |
| 导师意见： | | | | | |
| 学院备案意见：        年 月 日 | | | | | |