

## Project 4 Details

1. Find a research paper from a ML/NLP conference with **rank A or A\*** (ACL, EMNLP, NAACL, EACL, COLING, ICML, NIPS, AAAI, etc.) that uses deep neural networks to solve some NLP task (text classification, language modeling, machine translation, question answering, etc.). Conference ranks can be checked at <http://portal.core.edu.au/conf-ranks/>. It is ok to work on models and tasks which were not covered in our course, but you will need to self-study [Conference Portals](#) them.
2. There should be **no open-source code in Keras** for the paper.
3. Claim the paper in the table below. You can work in teams of up to 2 people. I do expect that projects done with 2 people have more impressive writeup and results than projects done by 1 person.
4. Reproduce the *main* result(s) and figures from the paper **in Keras**.
5. Report your work. Use the [Google Colab] / [Jupyter notebook] for your report and use the markdown capabilities. The report must have the following structure:
  - **Title, Author(s).**
  - **Introduction (20%)**
  - **Data and Task (0%)**
  - **Reproduction (70%).** Show the reproduction code here. Describe the steps you took to arrive at your results. Include *your* results in the report, as well as the results from the paper that you reproduce. Do your results confirm the claimed results from the original paper? Why? These are example questions you may want to answer:
    - What did you do in the same way? What did you do differently?
    - What was not mentioned in the paper but you had to make a decision on? How and why did you make decisions along the way?
  - **Conclusion (5%)**
  - **Writing / Formatting (5%)**
6. Submit your report as .ipynb file in Turnitin. The dataset import should be done programmatically in the code, don't send the dataset separately.

#	Student Name	Paper	Approved?
1	Rakhymzhan Kazbek	Baseline Needs More Love: On Simple Word-Embedding-Based Models and Associated Pooling Mechanisms. Dinghan Shen. ACL 2018.	✓
2	Sukhrat Arziyev	Dhingra, B., Shallue, C. J., Norouzi, M., Dai, A. M., & Dahl, G. E. (2018). Embedding text in hyperbolic spaces. <i>arXiv preprint arXiv:1806.04313</i> .	✓
3	Yerlan Duisenbay Gulzat Zhumakhanova	Zhou, Peng, et al. "Text classification improved by integrating bidirectional LSTM with two-dimensional max pooling." <i>arXiv preprint arXiv:1611.06639</i> (2016).	✓
4			
5	Temirlan Raimbekov	Mousa, A., & Schuller, B. (2017, April). Contextual bidirectional long short-term memory recurrent neural network language models: A generative approach to sentiment analysis. In <i>Proceedings of the 15th Conference of the European Chapter of the Association for Computational Linguistics: Volume 1, Long Papers</i> (pp. 1023-1032).	✓
6	Myrzakhan Naukhanov	"Identifying Well-formed Natural Language Questions" Manaal Faruqui, Dipanjan Das. Proceedings of the 2018 Conference on Empirical Methods in Natural Language Processing	✓
7	Moldir Toleubek	Vu, Ngoc Thang, et al. "Combining recurrent and convolutional neural networks for relation classification." <i>arXiv preprint arXiv:1605.07333</i> (2016). NAACL	✓
8	Nagima Chalkarova and Kassym Tengel	Dos Santos, C. and Gatti, M., 2014, August. Deep convolutional neural networks for sentiment analysis of short texts. In <i>Proceedings of COLING 2014, the 25th International Conference on Computational Linguistics: Technical Papers</i> (pp. 69-78).	✓
9	Aidana Kabdulova & Aman Ayazhan	Peng Zhou, Wei Shi, Jun Tian, Zhenyu Qi*, Bingchen Li, Hongwei Hao, Bo Xu Attention-Based Bidirectional Long Short-Term Memory Networks for Relation Classification <a href="https://www.aclweb.org/anthology/P16-2034.pdf">https://www.aclweb.org/anthology/P16-2034.pdf</a>	✓
10	Kuralay Baiseitova	Learning Tag Embeddings and Tag-specific Composition Functions in Recursive Neural Network Qiao Qian, Bo Tian, Minlie Huang, Yang Liu*, Xuan Zhu*, Xiaoyan Zhu	✓