

# FewRel: A Large-Scale Supervised Few-Shot Relation Classification Dataset with State-of-the-Art Evaluation

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<http://zhuhao.me/fewrel>

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使用数据库 wikidata 对 wikipedia 进行远程监督标注，然后使用众包方法确认，最后筛选数据，留下了 100 种关系，每种关系 700 个数据。

用了 64, 16, 20 种关系分别作为训练、验证、测试集。

具体讲解可参考: <https://zhuanlan.zhihu.com/p/52722394>

值得一提的是，这篇文章中给出的结果应该还是没有经过仔细调参的，比如 ProtoCNN，个人实验跑出来可以达到下面的结果

5way-1shot: dev: 76.49、test78.98

5way-5shot: 87.58/91.02

10way-1shot: 64.33/65.86

10way-5shot: 77.82/84.36

文章中报的结果非常低

Model	5 Way 1 Shot	5 Way 5 Shot	10 Way 1 Shot	10 Way 5 Shot
Finetune (CNN)	44.21 ± 0.44	68.66 ± 0.41	27.30 ± 0.28	55.04 ± 0.31
Finetune (PCNN)	45.64 ± 0.62	57.86 ± 0.61	29.65 ± 0.40	37.43 ± 0.42
kNN (CNN)	54.67 ± 0.44	68.77 ± 0.41	41.24 ± 0.31	55.87 ± 0.31
kNN (PCNN)	60.28 ± 0.43	72.41 ± 0.39	46.15 ± 0.31	59.11 ± 0.30
Meta Network (CNN)	64.46 ± 0.54	80.57 ± 0.48	53.96 ± 0.56	69.23 ± 0.52
GNN (CNN)	66.23 ± 0.75	81.28 ± 0.62	46.27 ± 0.80	64.02 ± 0.77
SNAIL (CNN)	67.29 ± 0.26	79.40 ± 0.22	53.28 ± 0.27	68.33 ± 0.25
Prototypical Network (CNN)	69.20 ± 0.20	84.79 ± 0.16	56.44 ± 0.22	75.55 ± 0.19
Human performance	92.22 ± 5.53	-	85.88 ± 7.40	-

Table 4: Accuracies (%) of all models on FewRel under four different settings.