BLEU Reinforced Generative Adversarial Net for Neural Machine Translation

Supplementary Material

A The samples of the translation results

We randomly sample some translation results of the baseline model and the proposed BR-CSGAN. The NMT model is Transformer and the translation task is Chinese-English.

Source	Jinnian qian liang yue guangdong gaoxinjishu chanpin chukou 37.6 yi meiyuan.
Reference	guangdong exports us \$3.76 billion worth of high technology products in the first two
	months of this year
Transformer	in the first two months of this year , guangdong exported 3.76 billion us dollars of hightech products
Transformer	in the first two months of this year , guangdong exported 3.76 billion us dollars worth
+BR-CSGAN	of new and high technology products
Source	Xinhuashe Guangzhou 3 yue 16 ri dian (jizhe chenji) zuixin tongji shuzi xianshi, jinnian 1 yue zhi 2 yue, guangdongsheng gaoxinjishu chanpin chukou 37.6 yi meiyuan, tongbi
	zengzhang 34.8%, zhan quansheng chukou zongzhi de 25.5%.
Reference	xinhua news agency report of march 16 from guangzhou (by staff reporter chen ji) - latest statistics indicate guangdong province exported us \$3.76 billion worth of high technology products , up 34.8 percent from the same period last year , which account for 25.5 percent of the total exports of the province .
Transformer	xinhua news agency, guangzhou, march 16 (reporter chen ji) the latest statistics show that from january to february this year, guangdong 's hightech products export amounted to usd 3.76 billion, up 34.8 percent over the same period of last year, accounting for 25.5 percent of the province 's total export value.
Transformer	xinhua news agency , guangzhou , march 16 (reporter chen ji) latest statistics show
+BR-CSGAN	that from january to february this year , the export of hightech products from
	guangdong province was 3.76 billion us dollars , up 34.8% year on year , accounting for
	25.5% of the total export value of the province .
Source	Gaoxinjishu chanpin chukou liangdian pin xian, wei Guangdong duiwaimaoyi de zengzhang zuochu le zhongyao gongxian.
Reference	high technology product export registers positive signs and makes great contribution to guangdong 's foreign trade growth .
Transformer	the high and new technology products have made great contribution to the growth of guangdong 's foreign trade .
Transformer	the rapid increase of the export intensity of high and new technology products has
+BR-CSGAN	made important contributions to the growth of guangdong 's foreign trade .
Source	Jinnian, zhezhong zhudao zuoyong yiran feichang tuchu.
Reference	the leading role of this area remains conspicuous this year .
Transformer	this leading role is still very prominent this year , and the leading role is still very significant .
Transformer +BR-CSGAN	this leading role is still very prominent this year .

Source	Ta dangji bei song wang yiyuan qiangjiu, muqian reng wei tuoli weixian.
Reference	he was rushed to hospital immediately and now remains in danger .
Transformer	he was immediately taken to the hospital and was still in danger .
Transformer	he was immediately taken to the hospital for rescue and is still in danger .
+BR-CSGAN	
Source	Meiguo zhengfu zai san kangyi zhongguo chuli fangfuming anjian de shoufa, zhi dangju
	kouliu fangfuming jige yue meiyou shenxu weibei guoji zhunze.
Reference	the us government has repeatedly protested against china 's approach in handling fang
	fuming 's case , accusing chinese authorities of violating international principles by
	detaining fang fuming for months without holding a hearing .
Transformer	the us government repeatedly protested china 's handling of the cases , saying that the
	detention of the detention of the chinese government for several months had not
	violated international norms .
Transformer	the us government has repeatedly protested china 's handling of the cases , saying that
+BR-CSGAN	the detention of the detaining authorities had violated international norms in the
	course of a trial in the next few months .
Source	Fangfuming de jia ren shuo, ta shoudao elie daiyu.
Reference	fang fuming 's family said he was badly treated .
Transformer	mr. fang 's family said he had been treated badly . mr. fang 's family said he had been
	treated badly .
Transformer	mr. fang 's family said he was treated badly .
+BR-CSGAN	
Source	Dang yi mingjizhe liang ci wen ta youguan hujintao fang mei jihua you mei you shou
	yingxiang de wenti, bing yaoqiu chengqing jiao zao dafu shifou keyi lijie wei hujintao 4
	yue fang mei reng jiang ruqi jinxing shi, zhangqiming jib u yuan duo jia pinglun, ye bu
	yuan zhengshi.
Reference	when asked twice by a journalist whether hu jingtao 's visit to the us has been affected
	and when requested to clarify whether the earlier reply could be understood as that hu
	jingtao 's visit to the us in april will go on as scheduled , zhang made no comments or
	confirmation
Transformer	when a reporter asked her twice if hu 's visit to the united states had been affected , he
	asked whether the earlier answer could be made clear if it was possible for him to
	understand that his visit to the united states in april was still going
Transformer	when a reporter asked her twice whether hu 's visit to the united states had beer
+BR-CSGAN	affected , he asked the earlier reply whether it was possible to understand that the visit