

Table 1: Reference of NLP tasks using different meta-learning methods.

	(A) Learning to initialize	(B) Learning to compare	(C) Other
Text Classification	(Dou et al., 2019) (Bansal et al., 2019) (Holla et al., 2020) (Zhou et al., 2021) (van der Heijden et al., 2021) (Bansal et al., 2020) (Murty et al., 2021)	(Yu et al., 2018) (Tan et al., 2019) (Geng et al., 2019) (Sun et al., 2019) (Geng et al., 2020)	Learning the learning algorithm: (Wu et al., 2019) Network architecture search: (Pasunuru and Bansal, 2020) (Pasunuru and Bansal, 2019) Learning to optimize: (Xu et al., 2021b) Learning to select data: (Zheng et al., 2021)
Sequence Labeling	(Wu et al., 2020) (Xia et al., 2021)	(Hou et al., 2020) (Yang and Katiyar, 2020) (Oguz and Vu, 2021)	Network architecture search: (Li et al., 2020b) (Jiang et al., 2019)
Relation Classification	(Obamuyide and Vlachos, 2019) (Bose et al., 2019) (Lv et al., 2019)	(Ye and Ling, 2019) (Chen et al., 2019a) (Xiong et al., 2018a) (Gao et al., 2019) (Ren et al., 2020)	
Knowledge Graph Completion		(Xiong et al., 2018b) (Wang et al., 2019) (Zhang et al., 2020) (Sheng et al., 2020)	
Word Embedding	(Hu et al., 2019)	(Sun et al., 2018)	Network architecture search: (Li et al., 2020b) (Jiang et al., 2019)
Question Answering	(M’hamdi et al., 2021) (Nooralahzadeh et al., 2020) (Yan et al., 2020) (Hua et al., 2020)		
Machine Translation	(Gu et al., 2018) (Indurthi et al., 2020) (Li et al., 2020a) (Park et al., 2021)		Network architecture search: (Wang et al., 2020a) Learning to select data: (Wang et al., 2020b) (Pham et al., 2021)
Parsing	(Guo et al., 2019) (Huang et al., 2018) (Langedijk et al., 2021) (Chen et al., 2020a) (Wang et al., 2021)		
Dialogue	(Qian and Yu, 2019) (Madotto et al., 2019) (Mi et al., 2019) (Huang et al., 2020a) (Dingliwal et al., 2021) (Qian et al., 2021) (Dai et al., 2020) (Huang et al., 2020b)		Learning to optimize: (Chien and Lieow, 2019)
Speech Recognition	(Hsu et al., 2020) (Kleijch et al., 2019) (Winata et al., 2020a) (Winata et al., 2020b) (Xiao et al., 2021)	(Lux and Vu, 2021)	Learning to optimize: (Kleijch et al., 2018) Network architecture search: (Chen et al., 2020c) (Baruwa et al., 2019)
Source Separation	(Wu et al., 2021)		
Keyword Spotting	(Chen et al., 2020b)		Network architecture search: (Mazzawi et al., 2019)
Sound Event Detection		(Shimada et al., 2020) (Chou et al., 2019)	
Voice Cloning			Learning the learning algorithm: (Chen et al., 2019b) (Serrà et al., 2019)
Multi-tasks			Learning to select data: (Tarunesh et al., 2021)
Multi-modal		(Eloff et al., 2019)	Learning the learning algorithm: (Surís et al., 2019) (Xu et al., 2021a)

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