

Table and references

		PubMed				arXiv			
Summarizer		RG-1	RG-2	RG-3	RG-L	RG-1	RG-2	RG-3	RG-L
Oracle		58.15	34.16	24.11	52.99	57.78	30.43	18.41	51.24
Lead		37.77	13.35	7.64	34.31	35.54	9.50	3.33	31.19
Abstractive or Nlts	Attn-Seq2Seq (Nallapati et al., 2016)	31.55	8.52	7.05	27.38	29.30	6.00	1.77	25.56
	Pntr-Gen-Seq2Seq (See et al.)	35.86	10.22	7.60	29.69	32.06	9.04	2.15	25.16
	Discourse summarizer (Cohan et al., 2018)	38.93	15.37	9.97	35.21	35.80	11.05	3.62	31.80
	TLM-I+E (G.M) (Subramanian et al., 2019)	42.13	16.27	8.82	39.21	41.62	14.69	6.16	38.03
	DANCER PEGASUS Gidiotis and Tsoumakas (2020)	46.34	19.97	-	42.42	45.01	17.60	-	40.56
	PEGASUS Zhang et al. (2019)	45.97	20.15	-	28.25	44.21	16.95	-	25.67
Extractive	BiGBIRD-Pegasus Zaheer et al. (2020)	46.32	20.65	-	42.33	46.63	19.02	-	41.77
	SumBasic (Vanderwende et al., 2007)	37.15	11.36	5.42	33.43	29.47	6.95	2.36	26.30
	LexRank (Erkan and Radev, 2004)	39.19	13.89	7.27	34.59	33.85	10.73	4.54	28.99
	LSA (Steinberger and Jezek, 2004)	33.89	9.93	5.04	29.70	29.91	7.42	3.12	25.67
	Sent-CLF (Subramanian et al., 2019)	45.01	19.91	12.13	41.16	34.01	8.71	2.99	30.41
	Sent-PTR (Subramanian et al., 2019)	43.30	17.92	10.67	39.47	42.32	15.63	7.49	38.06
	Bert Ranker (Nogueira and Cho, 2019)	43.67	18.00	10.74	39.22	41.65	13.88	5.92	36.40
	BERTSUMEXT (Liu and Lapata, 2019)	41.09	15.51	8.64	36.85	41.24	13.01	5.26	36.10
	BERTSUMEXT (SW) (Liu and Lapata, 2019)	45.01	20.00	12.05	40.43	42.93	15.08	6.01	37.22
	Longformer-Ext Beltagy et al. (2020)	43.75	17.37	10.18	39.71	45.24	16.88	8.06	40.03
	Reformer-Ext Kitaev et al. (2020)	42.32	15.91	9.02	38.26	43.26	14.86	6.66	38.10
	GBT-EXTSUM (Ours)	46.87	20.19	12.11	42.68	48.08	19.21	9.58	42.68

References

- Iz Beltagy, Matthew E. Peters, and Arman Cohan. 2020. [Longformer: The long-document transformer](#). *CoRR*, abs/2004.05150.
- Arman Cohan, Franck Dernoncourt, Doo Soon Kim, Trung Bui, Seokhwan Kim, Walter Chang, and Nazli Goharian. 2018. [A discourse-aware attention model for abstractive summarization of long documents](#). In *Proceedings of the 2018 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies, NAACL-HLT, New Orleans, Louisiana, USA, June 1-6, 2018, Volume 2 (Short Papers)*, pages 615–621. Association for Computational Linguistics.
- Günes Erkan and Dragomir R. Radev. 2004. Lexrank: Graph-based lexical centrality as salience in text summarization. *J. Artif. Int. Res.*, 22(1):457–479.
- Alexios Gidiotis and Grigorios Tsoumakas. 2020. [A divide-and-conquer approach to the summarization of long documents](#).
- Nikita Kitaev, Lukasz Kaiser, and Anselm Levskaya. 2020. [Reformer: The efficient transformer](#). In *8th International Conference on Learning Representations, ICLR 2020, Addis Ababa, Ethiopia, April 26-30, 2020*. OpenReview.net.
- Yang Liu and Mirella Lapata. 2019. [Text summarization with pretrained encoders](#). In *Proceedings of the 2019 Conference on Empirical Methods in Natural Language Processing and the 9th International Joint Conference on Natural Language Processing (EMNLP-IJCNLP)*, pages 3730–3740, Hong Kong, China. Association for Computational Linguistics.
- Ramesh Nallapati, Bowen Zhou, Cicero dos Santos, Çağlar Gulçehre, and Bing Xiang. 2016. [Abstractive text summarization using sequence-to-sequence RNNs and beyond](#). In *Proceedings of The 20th SIGNLL Conference on Computational Natural Language Learning*, pages 280–290, Berlin, Germany. Association for Computational Linguistics.
- Rodrigo Nogueira and Kyunghyun Cho. 2019. [Passage re-ranking with BERT](#). *CoRR*, abs/1901.04085.
- Abigail See, Peter J. Liu, and Christopher D. Manning. [Get To The Point: Summarization with Pointer-Generator Networks](#). In *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)*, pages 1073–1083. Association for Computational Linguistics.
- Josef Steinberger and Karel Jezek. 2004. Using latent semantic analysis in text summarization and summary evaluation.
- Sandeep Subramanian, Raymond Li, Jonathan Pilault, and Christopher J. Pal. 2019. [On extractive and abstractive neural document summarization with transformer language models](#). *CoRR*, abs/1909.03186.

- Lucy Vanderwende, Hisami Suzuki, Chris Brockett, and Ani Nenkova. 2007. [Beyond sumbasic: Task-focused summarization with sentence simplification and lexical expansion](#). *Inf. Process. Manag.*, 43(6):1606–1618.
- Manzil Zaheer, Guru Guruganesh, Avinava Dubey, Joshua Ainslie, Chris Alberti, Santiago Ontanon, Philip Pham, Anirudh Ravula, Qifan Wang, Li Yang, and Amr Ahmed. 2020. [Big bird: Transformers for longer sequences](#).
- Jingqing Zhang, Yao Zhao, Mohammad Saleh, and Peter J. Liu. 2019. [Pegasus: Pre-training with extracted gap-sentences for abstractive summarization](#).