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## **Text Summarization Using Deep Neural Networks**

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Abstract: A Deep Learning approach for text summarization has been explored in this paper. Automatic text summarization is a technique that compresses large amounts of text to a shorter summarized format including the important information. Here we present an approach to designing an automatic text summarizer that generates a summary by extracting sentences. The Deep learning approach deals with the abstractive text summarization for a single document based on the Sequence-to-Sequence model with LSTM. The system has the backend model for the processing of the document, a frontend for the user to input the document which is forwarded to the deep learning model through which the summarized document is given to the user. The implementation of the backend is done in python for the creation and the training of the deep learning model. Two evaluation techniques ROUGE and BLUE have been used for the evaluation of the model accuracy.

Keywords: Agricultural supply chain, Blockchain, Information database, Resource wastages

## REFERENCES

- [1]. Joshi, Akanksha & Fidalgo, Eduardo & Alegre, Enrique & Fernández-Robles, Laura. (2019). SummCoder: An unsupervised framework for extractive text summarization based on deep auto- encoders. Expert Systems with Applications. 129. 200-215. 10.1016/j.eswa.2019.03.045.
- [2]. S. Vijay, V. Rai, S. Gupta, A. Vijayvargia and D. M. Sharma, "Extractive text summarisation in Hindi," 2017 International Conference on Asian Language Processing (IALP), 2017, pp. 318- 321, doi: 10.1109/IALP.2017.8300607.
- [3]. Mr. Sarda A.T., Mrs. Kulkarni A.R. "Text Summarization using Neural Networks and Rhetorical Structure Theory" International Journal of Advanced Research in Computer and Communication Engineering Vol. 4, Issue 6, June 2015.
- [4]. Arti S. Bhoir, Archana Gulati "Multi-document Hindi Text Summarization using Fuzzy Logic Method" International Journal of Advance Foundation And Research In Science & Engineering (IJAFRSE) Volume 2, Special Issue, Vivruti 2016.
- [5]. Nitika Jhatta, Ashok Kumar Bathla "A Review paper on Text Summarization of Hindi Documents" IJRCAR VOL.3 ISSUE.5 may 2015.
- [6]. K. Yao, L. Zhang, D. Du, T. Luo, L. Tao and Y. Wu, "Dual Encoding for Abstractive Text Summarization," in IEEE Transactions on Cybernetics, vol. 50, no. 3, pp. 985-996, March 2020, doi: 10.1109/TCYB.2018.2876317.
- [7]. Gaikwad, Deepali K and Mahender, C Namrata. A Review Paper on Text Summarization International Journal of Advanced Research in Computer and Communication Engineering, 5(3). 2016. ACM.
- [8]. Chopra, S., Auli M. & Rush, A.M. (2016) Abstractive Sentence Summarization with Attentive Recurrent Neural Networks. 2016 Conference of the North American Chapter of the Association for Computational Linguistics on Human Language Technology
- [9]. Tian Shi, Yaser Keneshloo, Naren Ramakrishnan, and Chandan K. Reddy. 2020. Neural Abstractive Text Summarization with Sequence-to-Sequence Models. ACM Trans. Data Sci. 1, 1, Article 1 (January 2020),35 pages. https://doi.org/10.1145/3419106