

# Image Caption Generator using Deep Learning Approach

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**Abstract:** *The creation of captions for a picture is the focus of the image caption generator. The image's semantic meaning is extracted and translated into plain language. Also, there are built-in programs that create and offer a caption for a certain image. Image captioning is the process of creating a description of a picture in the form of a caption. The system must recognize and develop connections between things, people, and animals. This study uses deep learning to find, identify, and produce interesting captions for a given image. The practice of creating textual descriptions of a given image using computer vision and natural language processing methods is known as image captioning. This suggests a strategy for deriving a caption for a picture that highlights particular objects in the image.*

**Keywords:** Deep Learning, Feature Extraction, thresholding, image segment, CNN model, NLP

## REFERENCES

- [1]. Megha J Panicker, Vikas Upadhayay, Gunjan Sethi, Vrinda Mathur: "Image Caption Generator" International Journal of Innovative and Exploring Engineering (IJITEE) JAN-2021.
- [2]. Murk Chohan, Adil Khan, Muhammad Saleem Mahar, Saif Hassan, Abdul Ghafoor, Mehmood Khan: "Image Captioning using Deep Learning: A Systematic Literature Review" IJACSA) International Journal of Advanced Computer Science and Applications, Vol. 11, No. 5, 2020
- [3]. Peter Anderson, Xiaodong He, Chris Buehler, Damien Teney, Mark Johnson, Stephen Gould, Lei Zhang : "Bottom-Up and Top-Down Attention for Image Captioning and Visual Question Answering" 2018 IEEE/CVF Conference on Computer Vision and Pattern Recognition
- [4]. Liya Ann Sunny, Sara Susan Joesph, Sonu Sarah Geogy, K.s>Ssreelakshmi, Abin T. Abraham: "Image Caption Generator" International Journal of Recent Advances in Multidisciplinary Topics (IJSMT) APRIL-2021
- [5]. Aishwarya Maroju, Sneha Sri Doma, LahariChandarlapati : "Image Caption Generating Deep Learning Model" International Journal of Engineering Research & Technology (IJERT), September-2021
- [6]. Sulabhkatiyar, Samirkumarborgohain: "Comparative Evaluation of CNN Architectures for ImageCaption Generation" (IJACSA) International Journal of Advanced Computer Science and Applications, 2020
- [7]. Parth Kotak and Prem Kotak: "Image Caption Generator" (IJERT) International Journal of Engineering Research & Technology, November-2021
- [8]. Priyanka Kalena, NishiMalde, Aromal Nair, Saurabh Parkar: "Visual Image Caption Generator Using Deep Learning" International Conference on Advances in Science & Technology (ICAST-2019)
- [9]. Shaik Parvez: "Image Caption Generator Using Convolutional Neural Network Algorithm" International Journal of Science and Research (IJSR) 2022