

G.Narayanamma Institute of Technology & Science

(For women)

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Shaikpet, Hyderabad – 500 104

Department of Computer Science & Engineering



YEAR : II/IV
SEMESTER : II
CLASS : CSE-B
BATCH NO : 15

TITLE:

IMAGE TAGLINE GENERATOR

BY

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ABSTRACT

You saw an image and your brain can easily tell what the image is about, but can a computer tell what the image is representing? The Tagline generation is a challenging Artificial Intelligence problem where a textual description must be generated for a given photograph. It is considered as impossible till now! but it can be achieved using DEEP LEARNING techniques.

Image Tagline Generator is a task based on Python which uses deep learning techniques of Convolution Neural Network and a type of Recurrent Neural Network called LSTM. It requires both methods from computer vision to understand the content of the image and a language model from the field of Natural Language Processing (NLP) to turn the understanding of the image into words in the right order. The image is given as input and this image features will be extracted from Xception which is a CNN model trained on the dataset and then we feed the features into the LSTM model which will be responsible for recognizing the context of an image and generating the image tagline in English.

SYSTEM REQUIREMENTS:

Software Requirements:

Platform	- Deep Learning
Front End	- Jupyter Notebook
Development Tool	- Jupyter Notebook
Back End	- Machine Learning
Dataset	- Flicker8k Dataset

Hardware Requirements:

Name of the Processor	- Intel Core i7 (8 th Gen)
Hard Disk Capacity	- 128GB SSD, 1 TB SATA
RAM Capacity	- 8.00 GB