

# School of Computer Science Engineering and Technology

6

<b>Course-B. Tech</b>	<b>Type- General Elective</b>
<b>Course Code- CSET-335</b>	<b>Course Name- Deep Learning</b>
<b>Year- 2024</b>	<b>Semester- Even</b>
<b>Date- 26/04/2024</b>	<b>Batch- 2023-2024</b>

## CO-Mapping

Exp. No.	Name	CO1	CO2	CO3
10	To implement Mask RCNN for image segmentation	✓	✓	-✓ -

## Objectives

CO1: To explain the fundamentals of deep learning, Convolution neural network.

CO2: To articulate different problem of classification, detection, segmentation, generation and understand existing solutions/ deep learning architectures.

CO3: To implement a solution for the given problem and improve it using various methods transfer learning, hyperparameter optimization.

## Assignment-10

### Objective: Task is to implement Mask RCNN for image segmentation

Use the Mask R-CNN architecture and the pretrained weights (trained on MS COCO data set) to generate predictions for our own images (10 images from the below data set).

**Data set:** Blood cell data set

<https://www.kaggle.com/datasets/paultimothymooney/blood-cells>

**Model:** Mask RCNN

**Help:** <https://www.analyticsvidhya.com/blog/2019/07/computer-vision-implementing-mask-r-cnn-image-segmentation/>

<https://github.com/rajki franciska/maskrcnn-from-scratch/blob/master/MaskrCNN.ipynb>