

# Using convolutional neural network (CNN) approach for ship detection in Sentinel-1 SAR imagery.

## Abstract

Convolutional neural network (CNN) or (ConvNet) is a class of deep neural networks, most commonly applied to analyze visual imagery. Ship detection using SAR-Synthetic aperture radar images plays an important role in marine transportation, fishery management and maritime disaster rescue. Detection of ship is especially complicated under unfavourable conditions, such as during night-time or on cloudy days. In this paper, it uses CNN method, the faster R-CNN VGG16 in SAR based image to increase the accuracy of identification of ship as compared to traditional image based object detection.

In our final project we present a method to detect ships in the ocean using SAR image. Here size and location of ships can be estimated. Here the area of project used are image recognition and Deep learning where as in this paper we use convolutional neural network using SAR to detect ships