

Crowd Count and Density Mapping Using Dilated Convolutional Neural Networks

**B.Tech Computer Science & Engineering
Maharaja Agrasen Institute of Technology
(GGSIPU)**

Team Name: Team Rocket

Deepak Jindal: 35514802716

Kamaljot Singh Pannu: 35714802716

Vishal Yadav: 11414802716

ABSTRACT :-

There is a need for accurate crowd counting, crowd control or similar security services. We propose a solution in the form of a congested scene analysis tool or Congested Scene Recognition (CSRNet) that performs a data supported and deep learning enabled operation to count the number of people in a crowd and also to generate a high quality density map. Density map is extremely useful as simple count is not enough as same number of people could have dissimilar crowd density. The proposed CSRNet is composed of two major components a convolutional neural network (CNN) as the front-end for 2D feature extraction and a dilated CNN for the back-end, which uses dilated kernels to deliver larger reception fields and to replace pooling operations.