

## ABSTRACT

The use of video consuming bandwidth are huge in the Internet network. So it is very difficult to access video data on the Internet and is also hard to make a prediction model congestion. Besides, recording traffic conditions in a video by the camera, *IP Camera* will be difficult to be analyzed by the operator / supervisor camera is stalled or not if there are more and more surveillance cameras in a city.

The development of technology as a solution that can be used to overcome this problem is to utilize some computer science, namely *digital image* processing, *computer vision* algorithms and the application of the pin hole. With both the science of video will be converted into a frame image which then becomes an area of road congestion status so that the data generated is not large in size and easier to analyze.

Application Detection highway congestion by applying the *Pinhole algorithm* has an accuracy rate of 70% with some *Test parameters* that are used as such image size, Size of downloads, Size area of the analysis, the percentage of the number of traffic jams and many pinhole images of each analysis.

*Keywords : Detection of Traffic Jam, Computer Vision, Digital Image, IP Camera, Pinhole Algorithm, Test Parameters*