**Literature Review**

In today’s world surveillance is an important concern. Traditionally cameras are used for surveillance. Since the last century, a large number of cameras have been in use. Imaging technology have become a basic need in today’s world. There are thousands of applications related to camera in different fields such as medical (3D imaging, multiparametric endoscopy, ophthalmology, inspecting eye diseases, surgery, X-ray, MRT, ultrasound etc.); industries ( quality inspection, automotive mining, pharmaceuticals, etc.); traffic control systems (to enforce law and avoid accidents); military (to record material evidences, to predict battle field, bomb detection and many more). For all these applications, image quality of the camera matters a lot. The higher image quality leads to better processing, less data loss, and greater accuracy.

Traditional cameras are not flexible and also unaware of their environment. They cannot provide constant and standard image quality in every environment because of their fixed (non-programmable) internal architecture. If the environment varies i.e. a noisy environment, they fail to maintain standard image quality, hence cannot work on computer vision applications as these applications requires high quality images.

Except image quality, image pre-processing is also crucial. The images need to be pre-processed before they can be used to generate useful results according to the requirement of applications.

All this preprocessing generally held at server-side. These servers use different computational extensive as well as cost expensive algorithms to enhance the image quality for processing. If we consider network of cameras each in a different environment, the computational complexity as well as latency of server-side increases as it has to respond thousands of requests (having different environment and noise) at a time. Also, sometimes there arise an image which has in-depth data loss. In order to amplify the quality of such images server-side algorithms add more noise to these images which results in no use of such images. To all these problems a better and efficient solution is Edge Computing.

* **Edge Computing**

The word edge in this context means literal geographic distribution. Edge computing means “processing occurs near the source of the data”. Edge computing eliminates the need to send image data to server-side for processing. Provides a way to process the images directly on the camera by taking advantage of sensors and the use of end devices to take over the load of processing. This will decrease the latency faced during server-side processing, as well as no in-depth data loss as the noise and environment can be adjusted to make the image quality constant.