CHAPTER 6 TESTING OF HYPOTHESIS

Many of the algorithms stated in the earlier paragraphs do not bear from this problem. Although professional colony counters see great use in many settings, they are not idea for all, and have some major drawback that prevents them from seeing prolific use. To balance the compensation that both the academic and professional colony counters observe, and to build up a low cost, adaptable system that can be put in the hands of the normal researcher is the prime goal of this research.

“The size, shape and density of bacterial colonies may vary in the plates and so in images taken, obsessive testing is required before real implementation. Diverse verities of bacterial colonies may be at the same image. Implies the Counting cell colonies is a boring task when carried out with the light microscope. Moreover, unless strict double- blind protocols are adhered to, biased counts are difficult to avoid” Silvio D Brugger et al. (2012) and Salomon et al. (1969). The proposed method will work competently for lots of sample of bacteria.

In this method fast and simple blob analysis method with the aid of contrast stretching is described to identify the colonies. The required properties of the algorithm can be stated as under:

• It should work in any background conditions
• Light illumination should not interfere counting
• Variation of dish position in an image must be neglected
• Varying diameter of the dish in image can be processed
• Varying intensity of the dish background
• As well as the colonies have different types of morphologies and colors.
• They might be overlapped
• Software script can be modified by the end user according to requirements.

Considering the complete fulfillment of the above requirements implies the fulfillment of the hypothesis.
In an effort to make object recognition efficient and accurate enough for real applications; we have compared object extraction and boundary tracing algorithm and probabilistic techniques which form the basis of a promising paradigm for object recognition.

Our techniques effectively exploit prior knowledge to reduce the number of hypotheses that must be tested during recognition.

My contribution will be indirectly and directly useful to the society.