**Introduction**

In Sri Lanka as well as globally, fruits are consumed raw, cooked, or processed. That's because fruits are packed with energy-giving and disease-preventing properties. A healthy life can be obtained by eating fruits in daily life. Fruits are natural sources of vitamins and minerals which are essential for the proper functioning of the body and provide immense benefits to the body. Apart from this, the natural properties of fruits help to prevent health complications like cancer, high blood pressure, heat stroke, and diabetes. Fruits are generally divided into two segments products intended for consumers, fresh consumption, and developed by industries. Fresh consumption market Consumer buys fresh fruits for daily consumption or cooking. Product Purposes in the market, fruits are developed not only for edible purposes such as jam, sauce, or marmalade but also for non-edible purposes such as cosmetics, soaps, detergents, etc.

Mango belongs to the genus Mangifera and is one of the most famous and nutritious fruits. Mango fruit is edible and contains high moisture content known for its intense peel coloration, sweet flavor, and high nutritional value of vitamin C, β-carotene, and minerals. Mangoes vary in size, shape, color, taste, and several other qualities depending on the variety. The skin of an unripe mango is green and as the mango ripens, its color changes to yellow, orange, purple, or red.

Many fruits are produced in Sri Lanka and mango occupies a prominent place among them. Apart from local consumption, these fruits are also used for the export process. Therefore, the failure to meet the quality requirements of the fruits is a huge economic loss and it affects the farmer as well. Therefore, it is necessary to identify the ripeness and quality of mangoes. Parameters like size, shape, maturity, etc. are used in this process. Proper grading of this post-harvest process helps to increase the confidence of traders/farmers. It opens up confidence in his product and new export opportunities. In this research, computer vision is used to identify the ripeness and quality of mangoes. Computer vision has grown tremendously in many applications, so its capabilities have attracted the interest of several industries and have been chosen for this research due to its high accuracy.