Breast Cancer Prediction

I was successful in creating a machine learning model to predict malignant tumors. After building a model, I was able to get an AUC score of 0.96.

It is a well built model as we are 96% successful in predicting malignant tumor.

There are chances that my model may falsely predict breast cancer. From the precision (0.96) we can interpret that 0.04 of the times model may falsely predict breast cancer.

Model may also miss a malignant case while predicting. From the recall (96%) we can say that 4% of the times model may miss a malignant case.

* In my opinion Bare nuclei, normal nucleoli and bland chromatin are signs of benignity. So, they are very important in determining cancer. The mitotic count is also an important parameter but then it is difficult to detect mitosis. So, it has little less importance than others.
* Uniformity of the cell size and cell shape are valuable in determining whether the cells are cancerous as Cancer cells tend to vary in size and shape.
* Marginal adhesion is a sign of malignancy as Normal cells tend to stick together while Cancer cells lose this ability.
* Epithelial cell size: Epithelial cells that are significantly enlarge may be a malignant cell. So, size of the cell matters.