

## Capstone Project 2: Project Proposal

- What is the problem you want to solve?

Breast cancer is the most common cancer type in women. It's important to accurately diagnose malignancy at an early stage for improving survival. Even experienced doctors often fail to predict cancer and show 79% accuracy in diagnosis. I will use machine learning techniques to improve the method of prediction so that we can improve the accuracy in cancer prediction.

- Who is your client and why do they care about this problem? In other words, what will your client do or decide based on your analysis that they wouldn't have done otherwise?

The results obtained in this analysis will be used for people who are involved in cancer diagnosis including doctors. The accurate prediction between benign and malignant tumors will be crucial for saving patients lives.

- What data are you using? How will you acquire the data?

Data includes features of samples of cells from the patient. The features are obtained based on the images of the cell. I will acquire the data from the UCI machine learning repository.

<https://archive.ics.uci.edu/ml/datasets/Breast+Cancer+Wisconsin+%28Diagnostic%29>

- Briefly outline how you'll solve this problem. Your approach may change later, but this is a good first step to get you thinking about a method and solution.

I will use machine learning models and find the best model that can predict benign or malignant tumors.

- What are your deliverables? Typically, this includes code, a paper, or a slide deck.

I will deliver the code and a slide deck explaining the code.