***Subject*: Seminar**

***Topic*: Abstract**

Submitted By:

Ms. Divya Reji

7, S5,

MCA Dept., AJCE

Submitted To:

Ms. Pauline Paul

Asst. Professor,

MCA Dept., AJCE

SEMINAR ABSTRACT

Wine Vinification Prediction System using Machine Learning

Wine is an alcoholic drink typically made from fermented grapes. Yeast consumes the sugar in the grapes and converts it to ethanol and carbon dioxide, releasing heat in the process. Different varieties of grapes and strains of yeasts are major factors in different styles of wine. Wine quality, as Maynard Amerine once said, is easier to detect than define. This is partially due to quality being primarily subjective, and strongly influenced by extrinsic factors. Correspondingly, defining wine quality in terms of its chemistry will never be more than partially successful. Nonetheless, most serious wine connoisseurs tend to agree on what constitutes wine quality, that is, what they subjectively have come to like through extensive tasting. The problem statement is that there is a wine producing company that wishes to launch a new wine. To predict its quality, we are looking into its chemical composition. For that we have few chemical parameters like citrus acid content, acetic acid content, sweetness etc to determine the quality of our sample. As a solution to the above problem, we have created a machine learning model using random forest algorithm to determine whether the quality is good or bad. We have included many check points to see the process taking place which includes data collection, data pre-processing, splitting data for test and train data, applying algorithm, visualizing the data and then testing the model with the test set to check for the solution of our problem.