***PES UNIVERSITY ELECTRONIC CITY CAMPUS***

***DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING***

***INTRODUCTION TO DATA SCIENCE***

***PROJECT SYNOPSIS***

**BATCH NO** :- 18

**PROJECT TITLE** :- Predicting Recession using Yield Curve Analysis

**ABSTARCT** :- The global economy is a large and complex one and there are many different factors and variables that affect it in the smallest ways. A global recession or economic downturn is one of the most feared terms for most people as it usually signifies layoffs and downsizing.

We believe that by analyzing the historical interest rates on US Treasury Bonds, we can understand the investor’s mindset and predict upcoming recessions.

We will be using two datasets. One contains the US Treasury Bond interest rates for the last 30 years for Treasury Bonds of durations 1, 2, 3, 6 Months, 1, 2, 3, 5, 7, 10, 20 and 30 Years.

The second dataset contains dates of past US recessions. A recession has been defined as 2 or more consecutive quarters of negative GDP growth.

**DATASET NAME** :- US Treasury Bond Interest Rates

**DATASET LINK** :-

<https://www.treasury.gov/resource-center/data-chart-center/interest-rates/Pages/TextView.aspx?data=yieldAll>

<https://fred.stlouisfed.org/series/JHDUSRGDPBR>

**STUDENT DETAILS**

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