**Data Science for Engineers**

**Lab Report 7**

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**19l-1316**

**Section-7A**

Feature Engineering

**INTRODUCTION:**

Feature engineering refers to manipulation addition, deletion, combination, mutation of your data set to improve machine learning model training, leading to better performance and greater accuracy. Effective feature engineering is based on sound knowledge of the business problem and the available data sources. Feature engineering is the pre-processing step of machine learning, which is used to transform raw data into features that can be used for creating a predictive model using Machine learning or statistical Modelling. Feature engineering in machine learning aims to improve the performance of models.

**OBJECTIVES:**

• To get familiarized with feature engineering in data science

**Application:**

The Feature engineering is a machine learning technique that leverages data to create new variables that aren't in the training set. It can produce new features for both supervised and unsupervised learning, with the goal of simplifying and speeding up data transformations while also enhancing model accuracy.

**Issues:**

we never find any issue regarding this lab.

**Conclusion:**

In this lab we understand Feature engineering is an essential phase of developing machine learning models. Through various techniques, feature engineering helps in preparing, transforming, and extracting features from raw data to provide the best inputs to a machine learning model.