

## CS 6301 - Machine Learning Lab - Week 9

Date: 28.03.2024

### IMPLEMENTATION OF PRINCIPAL COMPONENT ANALYSIS ALGORITHM FOR DIMENSIONALITY REDUCTION

#### SPOT QUESTION

1. Write the python code to implement Principal Component Analysis (PCA) and run the code for PCA on the flight data provided in the FlightDelay.csv file.
  - a) How many components did the PCA generate when you first run the analysis?
  - b) Provide a table of feature weights for each component.
  - c) How many components would you keep and why?
  - d) Using answers from (b) and (c) which features would you keep?