

CS F320 – Foundations of Data Science – Assignment #2

Multivariate Time Series Analytics

Total Marks – 30 (weightage 15%)

Submission Deadline: 10th May 2020

Objective:

The objective of this assignment is to understand Multivariate Time Series Analytics (MVTs) and its applications. You are required to do the following:

1. Identify and implement an MVTs regression algorithm
2. Identify and implement an MVTs classification algorithm
3. Identify and implement an MVTs clustering algorithm
4. Identify one application for each (1-3) and apply the algorithms you have implemented.

Group Information – Max. 2 students per group (with documented work division among group members – differential marking is applicable). It is strongly recommended that both members of the group should develop an understanding of the entire assignment and not just of the part he/she is responsible for.

Deliverable 1 (due date: 25th April) – Group Information, work division, identification of algorithms, applications, and datasets (submit a 1-page report) [5 marks]

Deliverable 2 (due date: 10th May) – Final report (covering all theoretical aspects) and implementation details. [25 marks].

Theoretical rigor and understanding will fetch you credits. Good implementation of algorithms/techniques will also help you in scoring well.