CAP793:ADVANCE DATA VISUALIZATION-LABORATORY

Course Outcomes: Through this course students should be able to

CO1 :: understand and create data visualization

CO2 :: understand the different visualization techniques

CO3 :: discuss the purpose of visualization and visualization design

CO4 :: analyze better tools for data visualization systems

List of Practicals / Experiments:

Visualization tools
- Introduction to data visualization tools: Excel, Python, R, Tableau

Basic plotting techniques
- Learning basic plots such as gnuplot, charts, line, dots

Visualization data methods
- Learn about Time series, scatter plots, networks, and graphs

Visualization data process
- Learn about tools for acquiring data from the internet

Advance web techniques
- Learn about infogram, power BI and google chart

Python and R data visualization
- Learn about python and R visualization libraries

Tableau visualization
- To demonstrate the Tableau visualization graphical representations

Security data visualization
- To understand the various security data visualization techniques

Text Books:
1. DATA VISUALIZATION: A HANDBOOK FOR DATA DRIVEN DESIGN by ANDY KIRK, SAGE PUBLICATIONS

2. PRACTICAL DATA SCIENCE COOKBOOK: DATA PRE-PROCESSING, ANALYSIS AND VISUALIZATION USING R AND PYTHON by PRABHANJAN TATTAR, TONY OJEDA, SEAN PATRICK MURPHY, BENJAMIN BENGFORT, ABHIJIT DASGUPTA, PACKT PUBLISHING

References:
1. LEARN PYTHON VISUALLY: CREATIVE CODING WITH PROCESSING.PY by TRISTAN BUNN, NO STARCH PRESS