



# SNS COLLEGE OF TECHNOLOGY

Coimbatore-37.

An Autonomous Institution



**COURSE NAME : 19CSE311 & DATA VISUALIZATION**

**III YEAR/ VI SEMESTER**

**UNIT – 1 INTRODUCTION**

**Topic: Purpose, Visualization function and tone**

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## *Purpose of Data Visualization*

Data visualization is the practice of translating information into a visual context, such as a map or graph, to make data easier for the human brain to understand and pull insights from. The main goal of data visualization is **to make it easier to identify patterns, trends and outliers in large data sets.**

The purpose of data visualization is pretty clear. It is to make sense of the data and use the information for the organization's benefits.





# *Function of Data Visualization*



Data visualization helps to tell stories by curating data into a form easier to understand, highlighting the trends and outliers. A good visualization tells a story, removing the noise from data and highlighting useful information.

## **Three Functions of Data Visualization**

- Record Information-Store
- Explore Information(Analyze)
  - Process and Calculate
  - Reason about data
  - Feedback and Interaction
- Explain Information (Present) Communicate
  - Share
  - Collaborate & Emphasize Important aspects of data





## *Visualization Tone*



**“Tone: The distinction between ‘reading’ and ‘feeling’ data.”**

There are many similarities when establishing the tone of your visualization, with the main goal being **how you want your audience to interpret and perceive your visualization**. Your choice of charts, color, typography, size, and shapes all play a role in establishing your tone for your visualization.

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## *References*

1. Christian Toninski, Heidrun Schumann, Interactive Visual Data Analysis, CRC press publication, 2020
2. Aragues, Anthony. Visualizing Streaming Data: Interactive Analysis Beyond Static Limits. O'Reilly Media, Inc., 2018