Minor in AI

Revision

28 March, 2025

Topics Revised

1. **File handling and exception:** Introduction to file operations (reading, writing, appending) and handling exceptions using try-except blocks.
2. **Introduction to statistics:** Understanding the distinction between descriptive and inferential statistics.
3. **Data types and variables:** Covering structured vs. unstructured data, cross-sectional vs. time series data, and univariate vs. multivariate data.
4. **Population and sample:** Understanding the importance of representative sampling.
5. **Measures of central tendency**
6. **Measures of dispersion (variability)**
7. **Data distribution concepts:** Including frequency, relative frequency, and cumulative frequency.
8. **Graphical representation techniques:**
   - Histograms
   - Box plots
   - Scatter plots
9. **Practical application examples:** Utilizing Python libraries such as NumPy and Pandas for computing these statistics and visualizing data.

Related Lectures

- **File Handling and exception**:
  - File handling and exceptions Lecture
- **Pandas**:
  - Pandas Lecture 1
  - Pandas Lecture 2
- **Descriptive Statistics**:
  - Lecture Link
- **Plotting**:
  - Plotting Lecture 1
  - Plotting Lecture 2
  - Plotting Lecture 3