Supervised Learning Module Sergio A. Rojas, PhD.

Assignment #1: Al, Big Data, and Society

Overview

This assignment aims to explore the relationship between artificial intelligence (AI) and Big Data through a combination of data collection and analysis. Students will conduct a brief survey to gather data on public perceptions of AI and Big Data, and then write an essay analyzing their findings and discussing the implications for society.

Procedure

1. Survey Design:

- Create a short survey (5-7 questions) focusing on AI awareness, usage, concerns, and attitudes towards data privacy and collection.
- o Include questions such as:
 - How familiar are you with the term "artificial intelligence"?
 - Can you name some examples of Al you encounter in your daily life?
 - Do you trust AI systems? Why or why not?
 - What are your concerns about the development of AI?
 - How comfortable are you with companies collecting and using your personal data?
 - Give examples of situations in your daily life where large amounts of data can improve your quality of life. Do you think the government or companies are effectively using data to improve these areas?

2. Data Collection:

Administer the survey to at least 10 people in your community, ensuring a diverse sample.

3. Data Analysis:

- Analyze the survey data to identify trends and patterns.
- Use basic statistics (e.g., percentages, frequencies) to summarize your findings.

4. Essay Writing:

- Write a 500-750 word essay addressing the following:
 - Summarize the key findings from your survey.
 - Analyze the data, including identifying any surprising or unexpected results.
 - Discuss the relationship between AI and Big Data based on your survey findings, including examples of how Big Data is used to train AI models.
 - Explore the ethical implications of AI and Big Data for individuals and society, considering issues such as data privacy, bias, and surveillance.
 - Offer your personal reflections on the role of Al and Big Data in your own life and the future.

5. Optional:

o Create simple visualizations (e.g., charts, graphs) to enhance your essay.

Note: You may work in pairs for this assignment.