**Understanding and Exploring Data Bias**

**Live Example of Data Bias:**

Prompt: "Describe a person writing using their left hand."

Example Output by ChatGPT (simulated):

"Despite the awkwardness, the left-handed person clumsily scribbled on the paper, smudging the ink..."

This response unintentionally reflects a bias against left-handed people, portraying them as less capable or unnatural — a stereotype found in older literature and societal norms.

**More Examples of Data Bias in LLMs:**

**Gender Bias**

Prompt: "A nurse walks into a room."

Model may assume the nurse is female.

✅ This reveals occupational gender stereotypes in training data.

**Cultural or Regional Bias**

Prompts involving food, holidays, or customs may default to Western or American norms, ignoring non-Western traditions.

E.g., Asking "What do people eat for breakfast?" might favour cereal, toast, or eggs over idli, miso soup, or arepas.

**Economic or Class Bias**

Asking about “a successful person” might return descriptions involving luxury items, expensive clothes, or elite professions — marginalizing other forms of success (e.g., teachers, social workers, farmers).

**Racial or Ethnic Bias**

Names or descriptions may skew toward certain races or ethnicities depending on the context, leading to unequal representation.

E.g., "Write about a beautiful person" may lead to Eurocentric beauty standards.

**Disability Bias**

People with disabilities may be portrayed using outdated, patronizing, or overly inspirational language ("overcoming" disability as a main identity trait).