

## Unit 4: Model Evaluation in Machine Learning

### 1) Socialize the technology idiom of the day.

#### Grease Monkey:

**Meaning:** A mechanic or technician, especially one who maintains machines or vehicles.

**Example:** Our grease monkey is brilliant; she can fix a laptop as easily as a car engine.

### 3) Socialize key vocabulary about the fundamentals of statistics.

**Statistics:** The branch of mathematics dealing with the collection, analysis, interpretation, and presentation of numerical data.

**Probability:** The measure of the likelihood that an event will occur, expressed as a number between 0 and 1.

**Measures of central tendency:** Statistical measures that indicate the central or average value of a dataset, including mean, median, and mode.

**Probability distributions:** Mathematical functions that describe the likelihood of possible outcomes in a probability experiment.

**Variability:** The extent to which data points in a dataset differ from each other, often measured by variance or standard deviation.

Hypothesis testing: A statistical method used to make inferences about a population based on sample data, involving formulating and testing hypotheses about population parameters.

Data analysis: The process of inspecting, cleaning, transforming, and modeling data with the goal of discovering useful information, reaching conclusions, and supporting decision-making.