Core Technology:

* Training Set/Instance: The data examples used to train the model
* Model: The internal representation built during training that makes predictions
* Feature/Attribute: A measurable property of an instance used as an input
* Training Error vs Generalization Error: Metrics to evaluate performance on training data versus unsees (test) data
* Overfitting: When a model learns the training data too well (included noise) and fails to generalize
* Underfitting: When a model is too simple to capture the underlying structure in the data
* Regularization: Techniques that reduce model complexity (by limiting degrees of freedom) to combat overfitting
* Hyperparameters: Settings (like regularization strength) that control the learning process
* Holdout Validation: Splitting data into training, validation and test sets to fairly access model performance
* No Free Lunch Theorem: States that no single model is best for all problems; model performance depends on the data and assumptions made