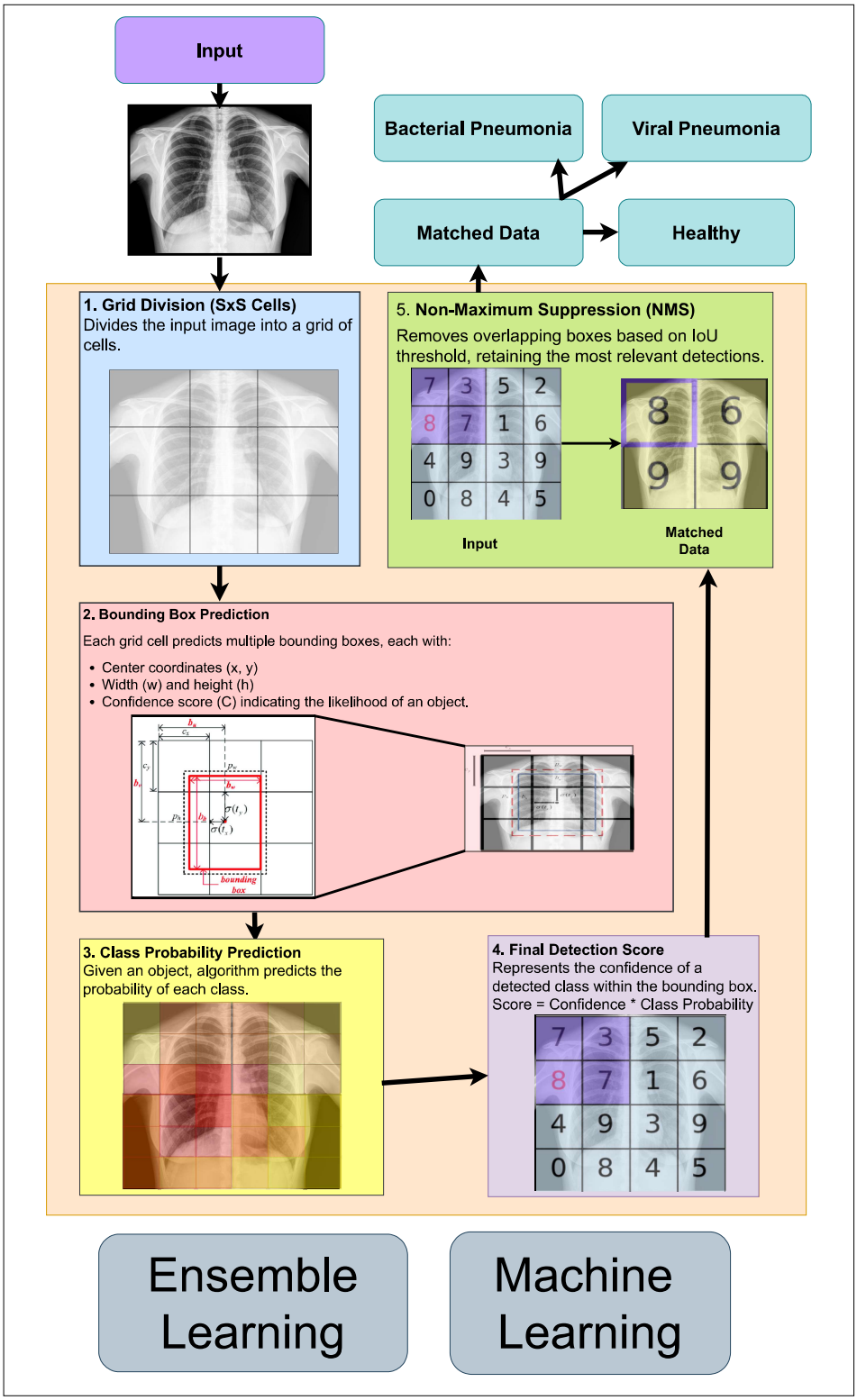
Input
Bacterial Pneumonia
Viral Pneumonia
Matched Data
Healthy
1. Grid Division (SxS Cells)
Divides the input image into a grid of cells.
5. Non-Maximum Suppression (NMS)
Removes overlapping boxes based on IoU threshold, retaining the most relevant detections.
Input
Matched Data
2. Bounding Box Prediction
Each grid cell predicts multiple bounding boxes, each with:
• Center coordinates (x, y)
• Width (w) and height (h)
• Confidence score (C) indicating the likelihood of an object.
3. Class Probability Prediction
Given an object, algorithm predicts the probability of each class.
4. Final Detection Score
Represents the confidence of a detected class within the bounding box.
Score = Confidence * Class Probability
Ensemble Learning
Machine Learning