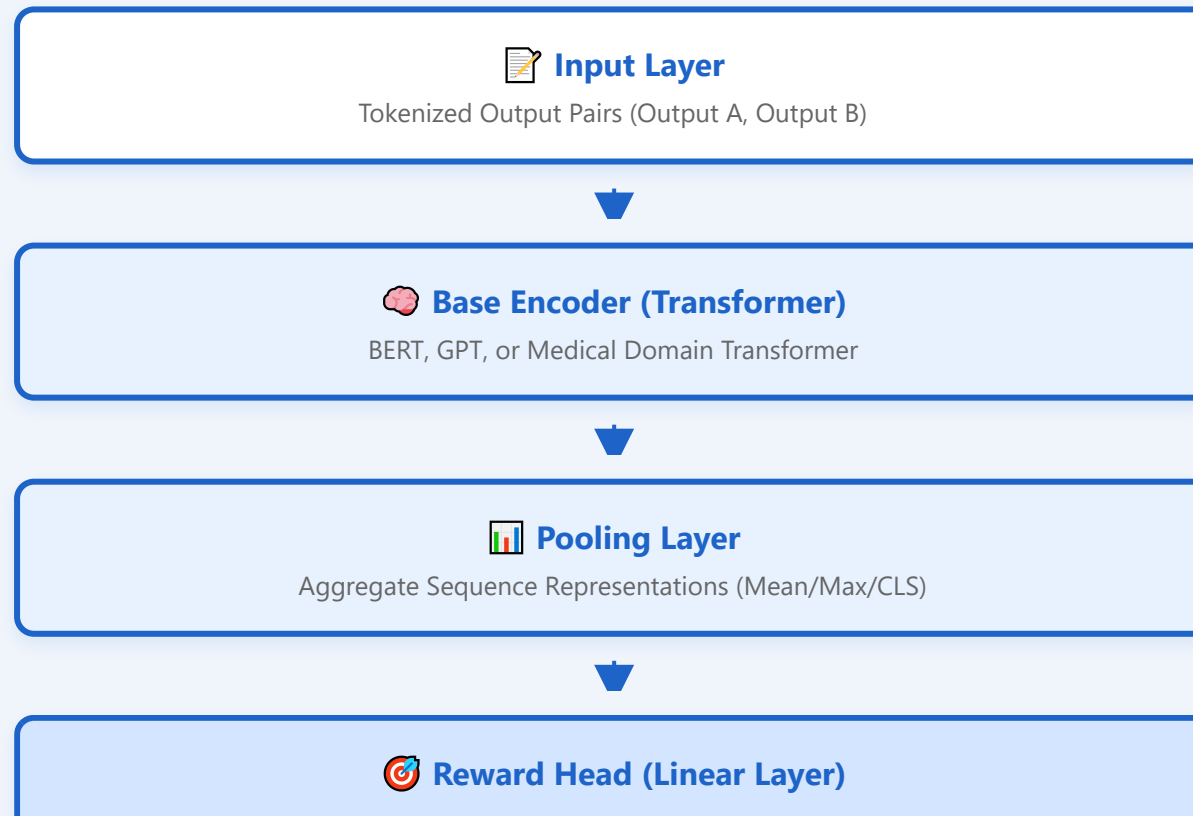


Reward Model Architecture

Model Structure

Reward models predict scalar scores for model outputs, learned from expert preference data to guide policy optimization.

Architecture Components



Output: Single Scalar Score $r(\text{output})$



Loss Function

Bradley-Terry / Ranking Loss

Training Process

1 Input

Pairs of outputs with preference labels

2 Forward Pass

Compute reward scores for both outputs

3 Loss Calculation

Penalize incorrect rankings

4 Optimization

Adam optimizer with LR scheduling