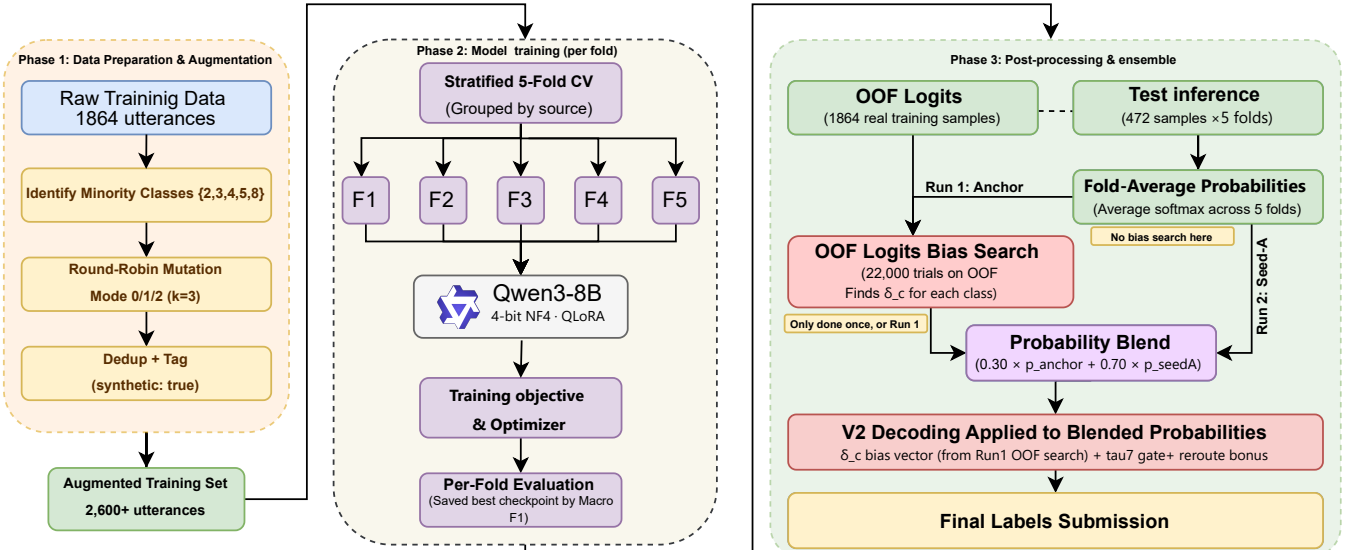
Phase 1: Data Preparation & Augmentation
Raw Trainingi Data
1864 utterances
Identify Minority Classes {2,3,4,5,8}
Round-Robin Mutation
Mode 0/1/2 (k=3)
Dedup + Tag
(synthetic: true)
Augmented Training Set
2,600+ utterances
Phase 2: Model training (per fold)
Stratified 5-Fold CV
(Grouped by source)
F1
F2
F3
F4
F5
Qwen3-8B
4-bit NF4 · QLoRA
Training objective
& Optimizer
Per-Fold Evaluation
(Saved best checkpoint by Macro F1)
Phase 3: Post-processing & ensemble
OOF Logits
(1864 real training samples)
Test inference
(472 samples ×5 folds)
Run 1: Anchor
Fold-Average Probabilities
(Average softmax across 5 folds)
No bias search here
OOF Logits Bias Search
(22,000 trials on OOF
Finds δ_c for each class)
Run 2: Seed-A
Only done once, or Run 1
Probability Blend
(0.30 × p_anchor + 0.70 × p_seedA)
V2 Decoding Applied to Blended Probabilities
δ_c bias vector (from Run1 OOF search) + tau7 gate+ reroute bonus
Final Labels Submission