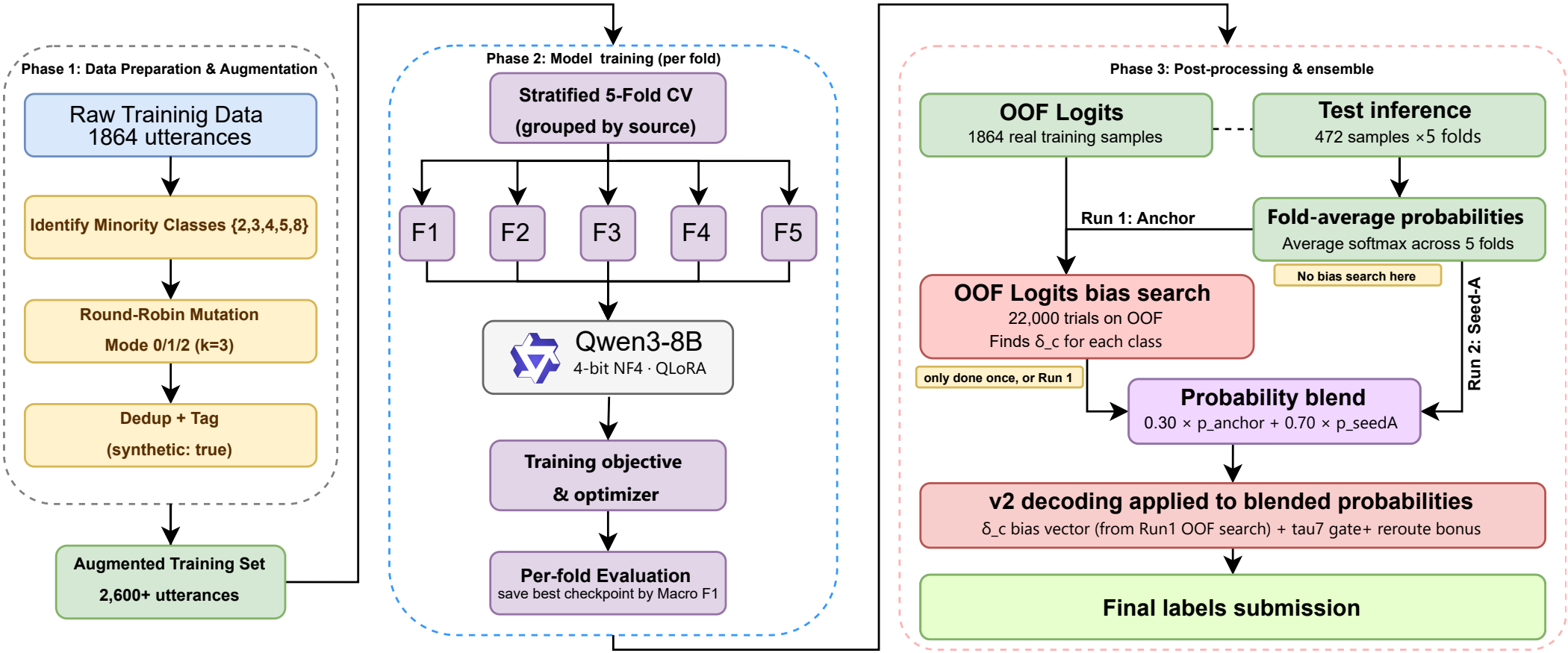
Phase 1: Data Preparation & Augmentation
Raw Traininig Data
1864 utterances
Identify Minority Classes {2,3,4,5,8}
Round-Robin Mutation
Mode 0/1/2 (k=3)
Dedup + Tag
(synthetic: true)
Augmented Training Set
2,600+ utterances
Phase 2: Model training (per fold)
Stratified 5-Fold CV
(grouped by source)
F1
F2
F3
F4
F5
Qwen3-8B
4-bit NF4 · QLoRA
Training objective
& optimizer
Per-fold Evaluation
save 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
only done once, or Run 1
Run 2: Seed-A
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