Feedback Loop Design

Closed-Loop Learning

Effective feedback loops ensure continuous improvement from deployment experience back into the training process.

Loop Components

- Deployment: Model serves real clinical interactions
- Monitoring: Log outputs, user interactions, outcomes
- Expert Review: Clinicians evaluate flagged cases
- Data Curation: Select valuable examples for training
- Model Update: Retrain with new feedback data
- Validation & Rollout: Test and deploy improved model

Feedback Triggers

- Low Confidence: Model uncertainty about output
- User Disagreement: User corrects or rejects output
- Adverse Events: Negative outcomes reported
- Novel Cases: Situations not seen during training
- Periodic Sampling: Random audit of routine cases