

# Concept Drift Detection (Concept Drift Detection)

## Drift Types

### Sudden Drift



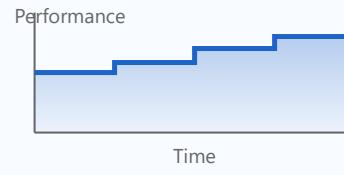
Abrupt change (e.g., Pandemic)

### Gradual Drift



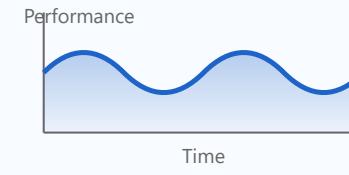
Progressive change (e.g., Population aging)

### Incremental Drift



Stepwise change

### Recurring Drift



Periodic pattern (e.g., Seasonal diseases)

## Detection Methods

- Statistical Tests: KS test, Chi-square test
- Performance Monitoring: Accuracy, AUC tracking
- Distribution Comparison: KL divergence, Wasserstein distance

- Window-based Methods: Sliding window, ADWIN

## **Detection Algorithms**

- DDM (Drift Detection Method)
- EDDM (Early Drift Detection Method)
- Page-Hinkley Test
- CUSUM (Cumulative Sum Control Chart)