The Autocorrelation Trap: Temporal Persistence Drives Predictive Performance

AR baseline (temporal + spatial lags only) achieves near-literature performance without news features

0.765
(PR-AUC)

0.816
(PR-AUC)

Performance (PR-AUC)

AR baseline (temporal + spatial lags ONLY) achieves 93.8% of literature performance using ZERO news features

Both models use PR-AUC metric for fair comparison. Demonstrates autocorrelation dominates predictive performance.

AR Baseline
(0 features)
This Study

Balashankar 2023
(News model)
Literature

Model Variant