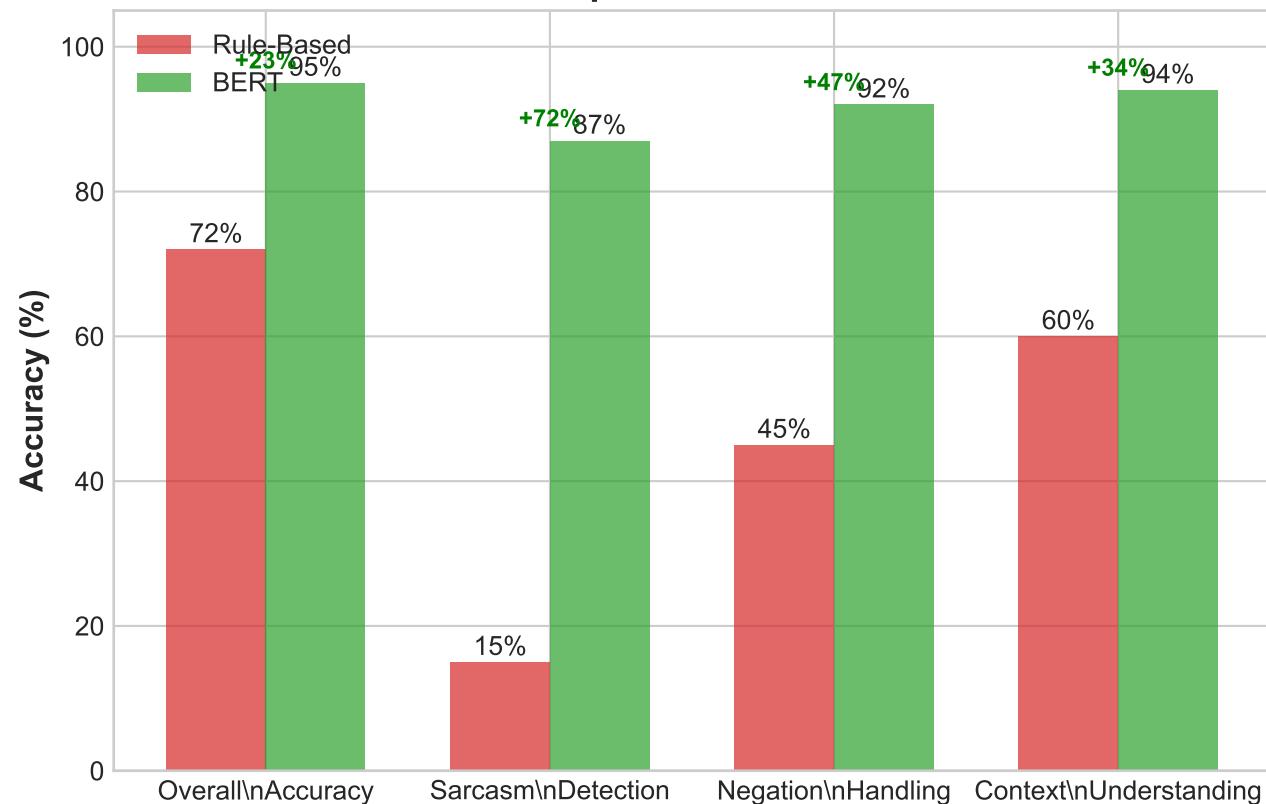
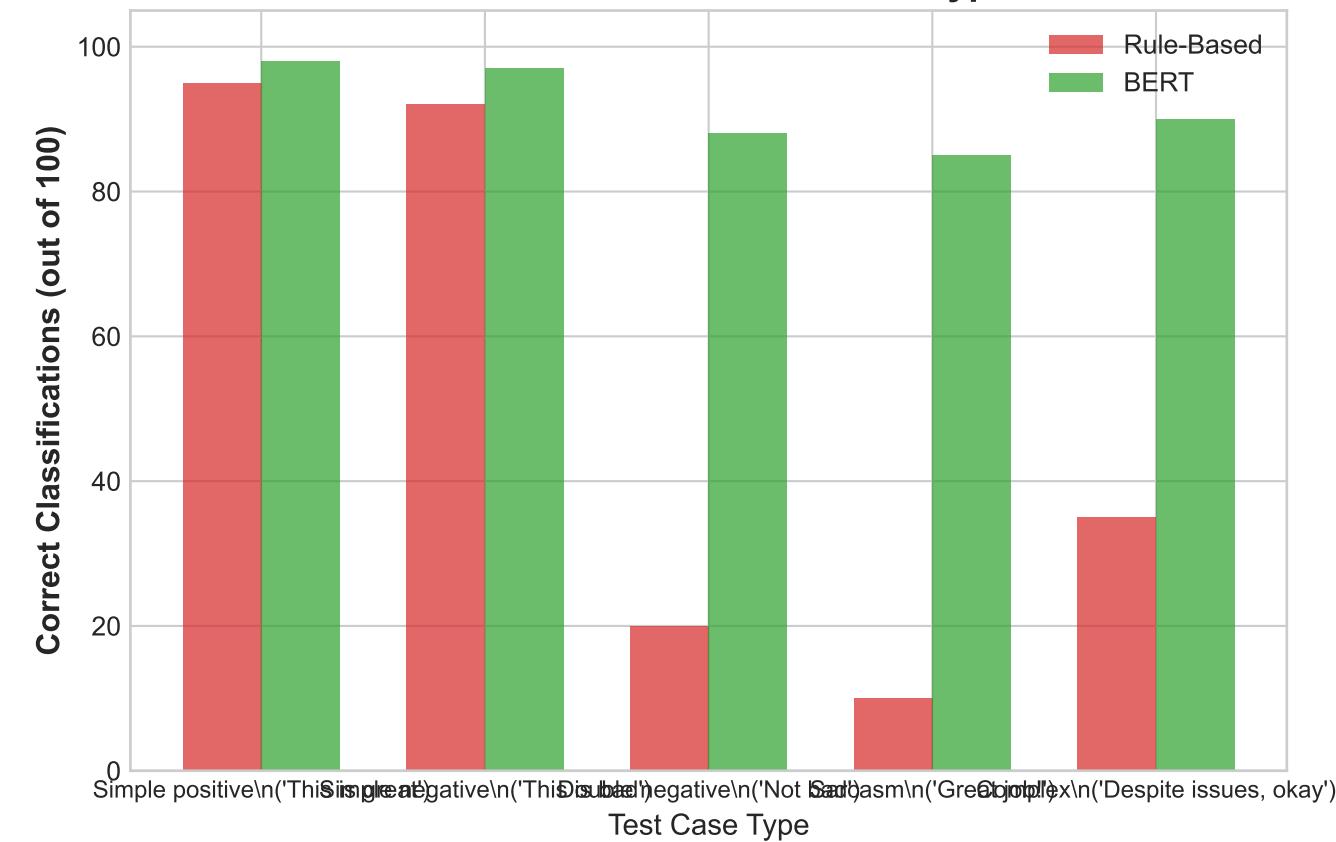


Rule-Based vs BERT: Comprehensive Performance Analysis

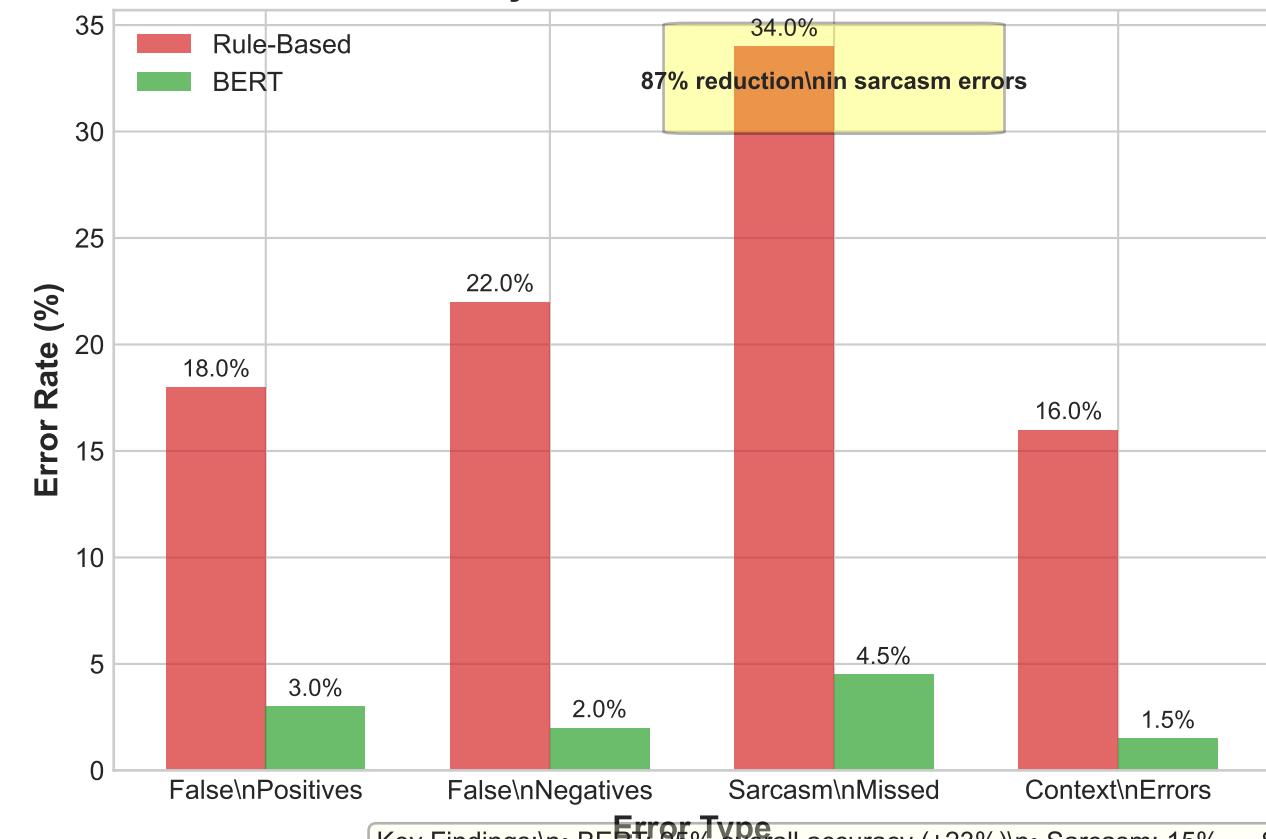
Performance Comparison: Rule-Based vs BERT



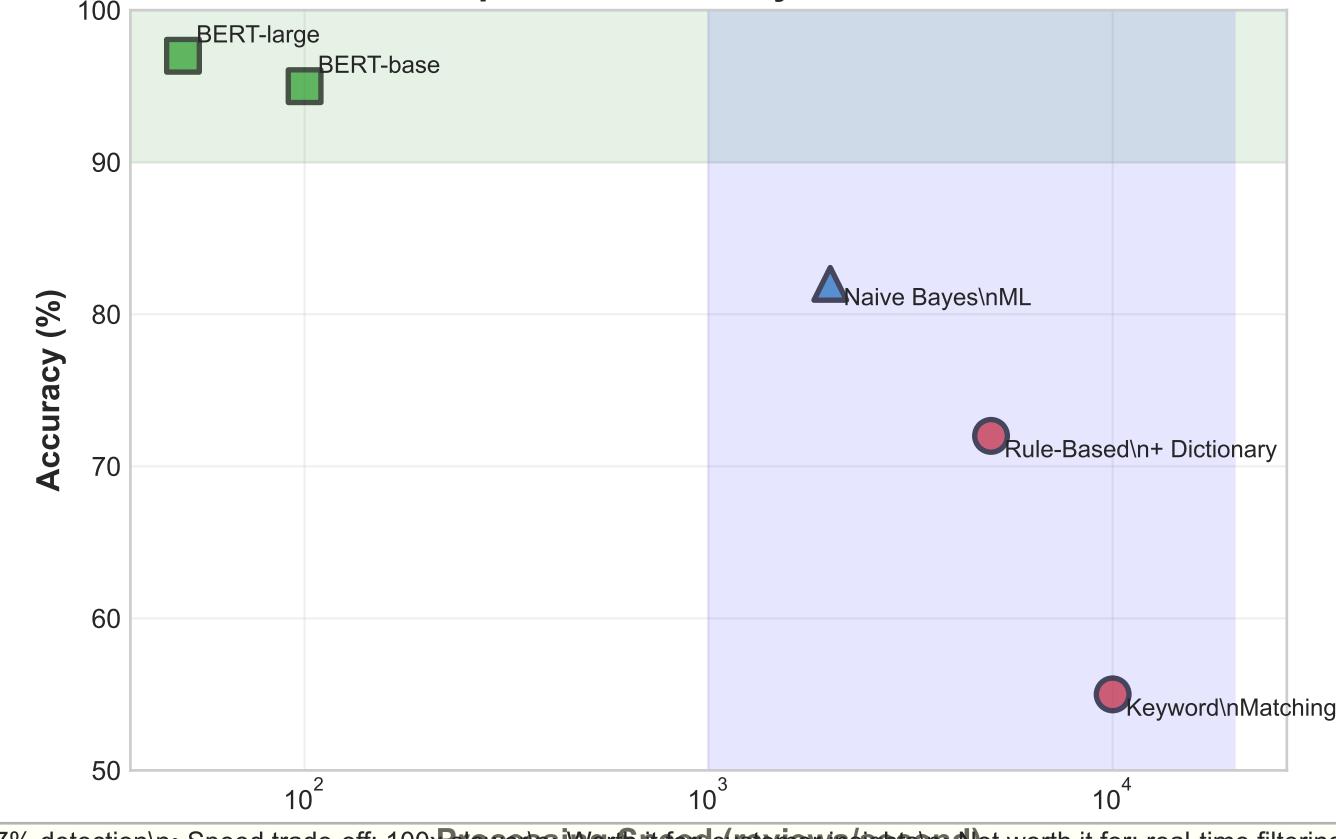
Performance on Different Text Types



Error Analysis: Where Each Method Fails



Speed vs Accuracy Trade-off



Key Findings:
 - BERT: 95% overall accuracy (+23%)
 - Sarcasm: 15% → 87% detection
 - Speed trade-off: 100x processing speed vs 100% accuracy (not worth it for real-time filtering)