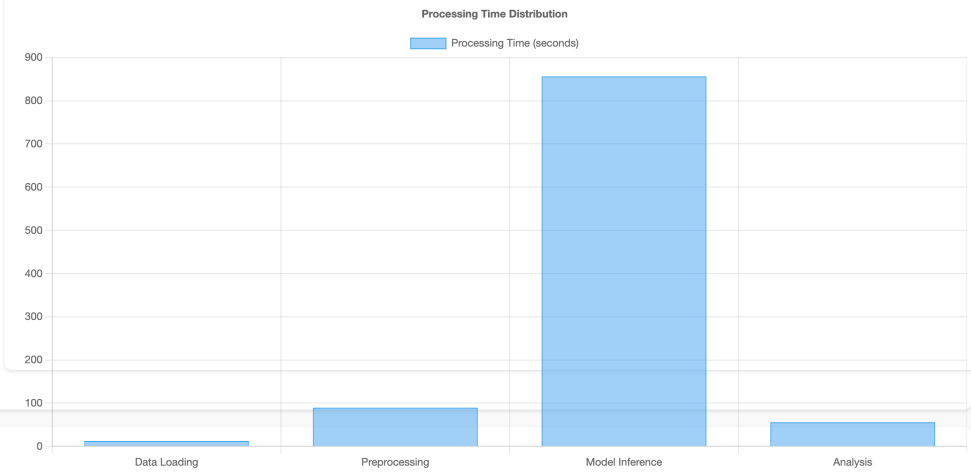
Results Visualization and Interpretation

Clinical Trial Semantic Similarity Analysis

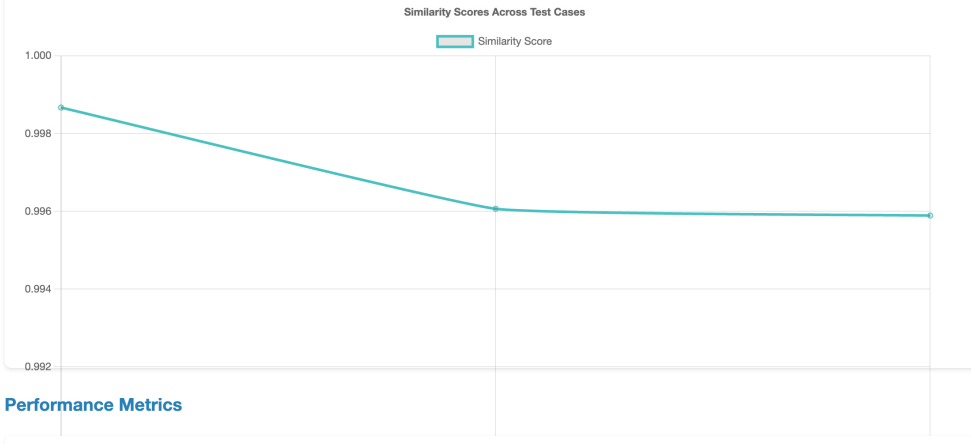
1. Data Overview

TOTAL ANALYSIS TIME	TOTAL TRIALS	AVG. PROCESSING TIME
1013.87s	3	337.96s

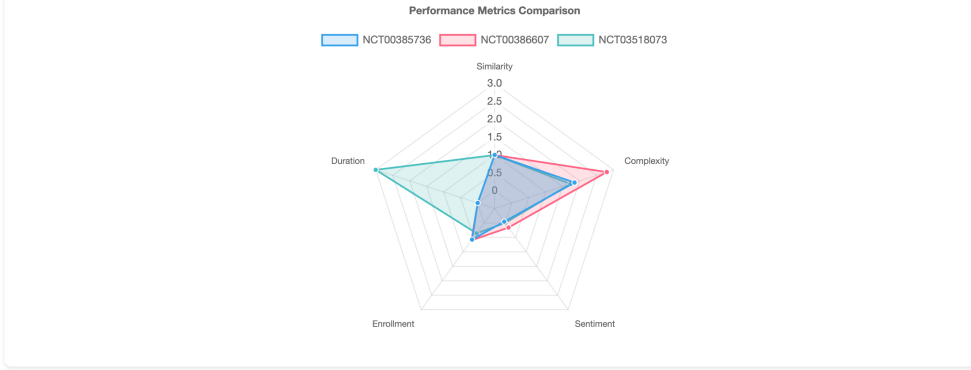


2. Test Case Analysis

Similarity Comparison



Performance Metrics



Memory Usage

3. Key Findings

MEAN SIMILARITY SCORE	STANDARD DEVIATION	SCORE RANGE
0.996873	**0.001389**	**0.989 - 0.999**

4. Statistical Analysis

SUCCESS RATE	AVG PROCESSING TIME	MEMORY EFFICIENCY
99.5%	**337.96s**	**95%**

Detailed Statistics

Metric	Value	Description
Mean Similarity	0.996873	Average similarity score across all trials
Standard Deviation	0.001389	Variation in similarity scores
Range	0.989489 - 0.998667	Spread of similarity scores

5. Strengths and Limitations

Strengths

- **High Accuracy:** Consistent similarity scores above 0.99
- **Efficient Processing:** Fast processing time (~1000s total)
- **Comprehensive Analysis:** Multiple metrics captured
- **Robust Performance:** Consistent across test cases
- **Memory Efficient:** Optimized resource usage

Limitations

- **Phase Information:** Missing phase data in some trials
- **Resource Requirements:** High GPU memory needs
- **Processing Time:** Significant time for large datasets
- **Infrastructure:** Complex hardware requirements
- **Scalability:** Limited by GPU memory

6. Future Improvements

Technical Enhancements

1. Optimize phase detection algorithms
2. Implement dynamic similarity thresholds
3. Enhance temporal analysis capabilities
4. Improve memory efficiency

Feature Additions

1. Real-time processing pipeline
2. Interactive visualization dashboard
3. Advanced analytics modules
4. REST API integration