End-to-End Sentiment Analysis Architecture

Data Ingestion

Raw Text
• *Reviews*
• *Social Media*
• *Surveys*

Performance Metrics:
• Latency: <100ms
• Throughput: 10K docs/min
• Accuracy: >92%

Preprocessing

Clean Text
• *Normalized*
• *Tokenized*

Emotion Detection

Feature Extraction

Embeddings
• *BERT*
• *TF-IDF*

Aspect Extraction

Aggregation

Unified Insights

Insights Generation

Model Inference

Predictions

Sentiment Scoring

Dashboard
Alerts
Reports