

AI Quality Metrics

Core Performance

Accuracy & Correctness

- Precision & Recall
- F1 Score
- Mean Average Precision
- Top-K Accuracy

Response Quality

- Coherence
- Fluency
- Relevance
- Completeness
- Conciseness

Advanced Language Model

Semantic & Content

- GPT Similarity
- Semantic Similarity
- Content Diversity
- Creativity Index
- Contextual Appropriate

Groundedness & Factuality

- Groundedness Score
- Factual Accuracy
- Hallucination Rate
- Citation Quality
- Temporal Accuracy

Safety & Alignment

Content Safety

- Toxicity Detection
- Hate Speech Classification
- Violence & Self-Harm Indicators
- Sexual Content Detection
- Profanity & Vulgarity Scores

Bias Fairness

- Demographic Bias
- Cultural Sensitivity
- Gender Bias
- Racial & Ethnic Fairness
- Socioeconomics Bias

Alignment & Control

- Refusal Appropriateness
- Instruction Following
- Behavioral Consistency
- Value Alignment

Reliability & Robustness

System Reliability

- Consistency Score
- Reproducibility
- Stability
- Error Rate
- Graceful Degradation

Adversarial Robustness

- Prompt Injection Resistance
- Jailbreak Attempts
- Edge Case Handling
- Noise Tolerance
- Stress Testing Results

Technical Performance Indicators

Speed & Efficiency

- Response Latency
- Throughput
- Time to First Token
- Processing Speed
- Queue Time

Resource Utilization

- Computational Cost
- Memory Usage
- Energy Efficiency
- Storage Requirements
- Bandwidth Usage

Scalability

- Concurrent User Capacity
- Load Balancing Effectiveness
- Auto-scaling Response
- Fault Tolerance
- Recovery Time

Domain-Specific

Business Process Integration

- Workflow Integration Success
- Data Pipeline Quality
- Decision Support Effectiveness
- Automation Success Rate
- Process Improvement Metrics

Compliance & Governance

- Regulatory Compliance
- Data Privacy Protection
- Audit Trail Completeness
- Policy Adherence
- Transparency Score

Industry Specific

- Healthcare
- Finance
- Legal
- Education
- Customer Services

Advanced Analytics & Meta

Drift & Evolution

- Model Drift Detection
- Data Drift Detection
- Concept Drift
- Performance Degradation
- Adaptation Effectiveness

Quality Index

- Composite Quality Score
- Quality Trend Analysis
- Benchmark Comparison
- Improvement Velocity