AI Model Governance Framework

Summit Digital Solutions, Inc.

Effective Date: January 15, 2024

Document Version: 1.0

1. Purpose and Scope

1. This AI Model Governance Framework ("Framework") establishes the standards, procedures, and controls governing the development, deployment, and maintenance of artificial intelligence and machine learning models ("AI Models") by Summit Digital Solutions, Inc. ("Company") through its Peak Performance Platform and related services.

2. This Framework applies to all AI Models developed, implemented, or maintained by the Company, including those integrated into client systems through digital transformation initiatives.

2. Definitions

1. "AI Model" means any algorithmic system using machine learning, deep learning, neural networks, or other artificial intelligence technologies deployed within the Company's solutions.

2. "Model Risk" means potential adverse consequences from decisions based on incorrect or misused model outputs and reports.

3. "Production Environment" means the live operational environment where AI Models process actual client data and generate business-critical outputs.

3. Governance Structure

1. AI Oversight Committee

- Composed of Chief Technology Officer, Chief Innovation Officer, and Chief Digital Officer
- Quarterly review of model performance and risk metrics
- Approval authority for production deployment of new AI Models
- Final arbitration of model-related disputes or concerns

2. Model Risk Management Team

- Reports to Chief Technology Officer

- Daily monitoring of model performance
- Implementation of validation procedures
- Documentation maintenance and compliance verification

4. Development Standards

1. Model Documentation Requirements

- Detailed architecture specifications
- Training data sources and preprocessing procedures
- Performance metrics and validation methodology
- Risk assessment and mitigation strategies
- Implementation requirements and dependencies

2. Development Controls

- Version control requirements using approved repositories
- Code review procedures and approval workflows
- Testing protocols for various operational scenarios
- Documentation of model limitations and assumptions

5. Validation and Testing

1. Pre-deployment Validation

- Independent validation by Model Risk Management Team
- Performance testing across defined scenarios
- Bias detection and fairness assessment
- Security vulnerability scanning
- Integration testing with target systems

2. Ongoing Monitoring

- Real-time performance monitoring
- Drift detection and model degradation alerts
- Periodic revalidation requirements
- Client feedback integration

6. Deployment Procedures

1. Production Release Requirements

- Oversight Committee approval
- Completed validation documentation
- Client acceptance testing results
- Rollback procedures
- Emergency response protocols

2. Change Management

- Version control procedures
- Update notification requirements
- Testing requirements for model updates
- Documentation update procedures

7. Risk Management

1. Risk Assessment

- Regular risk assessments of deployed models
- Impact analysis for critical business processes
- Client-specific risk evaluation
- Compliance with regulatory requirements

2. Risk Mitigation

- Fallback procedures for model failure
- Performance bounds and automatic shutdown triggers
- Manual override capabilities
- Incident response procedures

8. Data Governance

1. Data Quality Requirements

- Input data validation procedures
- Data freshness requirements

- Missing data handling protocols
- Data retention policies

2. Privacy and Security
- Data encryption requirements
- Access control procedures
- Client data segregation
- Compliance with privacy regulations

9. Compliance and Reporting

1. Documentation Requirements
- Model inventory maintenance
- Performance metric reporting
- Incident documentation
- Audit trail requirements

2. Review Procedures
- Quarterly performance reviews
- Annual comprehensive assessments
- External audit support
- Regulatory compliance verification

10. Amendments and Updates

1. This Framework shall be reviewed annually by the AI Oversight Committee and updated as necessary to reflect changes in technology, business requirements, or regulatory environment.

2. All amendments must be approved by the AI Oversight Committee and documented in the Framework version history.

Execution

IN WITNESS WHEREOF, this Framework has been approved and adopted by the authorized representatives of Summit Digital Solutions, Inc.

By:

Name: Dr. Alexandra Reeves

Title: Chief Executive Officer

Date: January 15, 2024

By:

Name: Michael Chang

Title: Chief Technology Officer

Date: January 15, 2024