# **Constitutional Al Architecture**

A governance layer that sits above foundation models, not a wrapper

#### **INPUT LAYER**

User requests • External data sources • API calls • Multi-modal inputs (text, voice, image) • Enterprise system integrations



#### **CONSTITUTIONAL GOVERNANCE LAYER**

The governance spine that sits above foundation models

#### **Policy Gates**

Rule enforcement & validation

#### **Bias Detection**

Real-time fairness monitoring

**Audit Logging** 

**Human-in-the-Loop** 



#### **OUTPUT LAYER**

Auditable AI responses • Explainable decisions • Enterprise-deployable outputs • Compliance-ready documentation • Multi-stakeholder transparency

## **Key Differentiator**

Governance infrastructure that operates **independently** of any specific foundation model. Architecture-level innovation, not prompt-level optimization.

## **Technical Components**

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### **Policy Gates**

Constitutional constraints enforced at the infrastructure level. Requests are validated against organizational policies before reaching foundation models, ensuring compliance without post-processing.

### **Bias Detection**

Real-time monitoring of AI outputs for fairness, representation, and unintended discrimination. Multi-dimensional bias analysis across protected categories with configurable sensitivity thresholds.

## **Audit Logging**

Complete traceability of all AI decisions, inputs, reasoning paths, and human interventions. Immutable audit trails that support regulatory compliance and forensic analysis.

### **Human-in-the-Loop Escalation**

Automated detection of edge cases, ambiguous scenarios, and high-stakes decisions. Intelligent routing to appropriate human reviewers with full context and recommendation transparency.

## **Operational Status**

71

**ACTIVE MODULES** 

Distributed runtime components operational

5

**PRODUCTION DEMOS** 

Live applications across use cases

100%

**AUDIT COVERAGE** 

All decisions logged and traceable

## **See It in Action**

Explore working demos that showcase the Constitutional AI architecture across different enterprise use cases.

**View Demos** 

**Request Technical Evaluation** 

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