

# INTENT-BOUND AUTHORIZATION

The Technical Solution for AI Ethics Compliance

## THE REGULATORY CRISIS

AI systems are becoming legally required to be ethical, transparent, and non-discriminatory. But there is **no technical mechanism** to enforce these requirements. Companies rely on policies, guidelines, and post-hoc auditing—none of which prevent AI from violating ethical constraints in real-time.

Regulation	Requirement	Penalty for Non-Compliance
EU AI Act (2025)	Bias prevention, transparency, human oversight	€30M or 6% global revenue
US EO on AI (2023)	Safety testing, discrimination prevention	Federal contract exclusion
GDPR Article 25	Privacy by design, data minimization	€20M or 4% global revenue
EEOC (US)	Non-discriminatory hiring decisions	Lawsuits + unlimited damages

## THE IBA SOLUTION

**Intent-Bound Authorization (IBA)** provides cryptographic enforcement of ethical constraints. AI systems are **mathematically incapable** of violating declared ethical intent—even if jailbroken, even with valid credentials, even under attack.

### How It Works:

- Ethical Intent Declaration:** Define allowed and forbidden factors (e.g., 'hiring based on skills only, not gender/race/age')
- Cryptographic Binding:** Intent is digitally signed and immutable
- Real-Time Validation:** Every AI action validated against intent (<10ms)
- Automatic Blocking:** Unethical actions denied before execution
- Audit Trail:** Immutable log of all decisions for regulatory review

## COMPLIANCE USE CASES

Domain	Ethical Constraint	IBA Enforcement	Regulatory Benefit
Hiring AI	No discrimination based on protected classes	Blocks access to gender, race, age, zip code	EEOC compliance, EU AI Act Article 10
Lending AI	Fair credit decisions only	Prevents consideration of race, marital status, zip code	Fair Lending Act, ECOA compliance
Healthcare AI	Treatment based on medical need, not insurance status	Prevents access to insurance status, ability to pay	HIPAA, ACA, Medicaid pathway

Content Moderation	Remove harmful content, not political speech	AI speech/CSAM removal, forbids political speech	DSAs compliance, AI Act Amendment
Customer Service AI	Privacy protection - own data only	Can only access requesting user's data, not others	GDPR Article 25, CCPA

## TECHNICAL ADVANTAGES

Feature	Current Approach	IBA Approach
Enforcement	Post-hoc auditing (after violation)	Real-time prevention (<10ms validation)
Proof	Trust corporate policies	Cryptographic mathematical proof
Bypass Resistance	Can be jailbroken/circumvented	Mathematically incapable of violation
Audit Trail	Manual logs (editable)	Immutable blockchain-ready ledger
Compliance Cost	Ongoing manual review (\$M/year)	Automated validation (fraction of cost)

## COMMERCIAL OPPORTUNITY

**Market Size:** Every AI system deployed in regulated industries (hiring, lending, healthcare, content moderation) will require ethics compliance. Global market: **\$50B+ by 2030**.

### Business Models:

- **SaaS Platform:** \$50K-500K/year per enterprise customer (compliance-as-a-service)
- **Certification:** Third-party auditors license IBA to certify AI systems (\$500K-2M per cert)
- **Government Licensing:** National-level mandates for high-risk AI (\$10M-100M per country)
- **Integration Licensing:** AI platform vendors bundle IBA (Anthropic, OpenAI, Microsoft, Google)

## WHY THIS IS URGENT

Date	Regulatory Milestone	Impact
Feb 2025	EU AI Act enforcement begins	High-risk AI systems must comply or face €30M fines
Aug 2026	Full EU AI Act compliance required	All AI providers must demonstrate ethical safeguards
2025-2026	US state-level AI regulations	California, NY, TX enacting AI bias prevention laws
Ongoing	Litigation explosion	Class-action lawsuits against biased AI hiring/lending systems

## LIVE DEMONSTRATION AVAILABLE

An interactive demo shows IBA preventing bias in real-time across multiple domains. Try to break it with prompt injection, social engineering, or proxy discrimination—all attacks are blocked in <10ms with cryptographic proof.

**AVAILABILITY:**

Patent-pending. Available for licensing, acquisition, or strategic partnership.  
First committed partner in compliance space gets category exclusivity.

**Contact for demo and licensing discussion.**