Ethics Approval Documentation

Ternary Moral Logic (TML) Framework Research

Institutional Review Board (IRB) Documentation

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Research Title: "Development and Validation of Ternary Moral Logic Framework for Ethical AI Decision-

Making"

Executive Summary

This document provides comprehensive ethics approval documentation for the development, testing, and deployment of the Ternary Moral Logic (TML) framework. The research has been designed to meet the highest ethical standards for AI research, human subjects protection, and responsible innovation in artificial intelligence.

Ethics Committee Status: Framework Approved

Approval Date: July 27, 2025 **Review Period**: 12 months **Next Review**: July 27, 2026

Research Ethics Overview

Research Purpose and Scope

The TML framework represents a novel approach to AI ethics that introduces a three-state moral reasoning system (Moral, Immoral, Sacred Pause) to address limitations in current binary ethical frameworks. This research aims to:

- 1. **Develop** a philosophically grounded framework for AI moral reasoning
- 2. Validate the framework across multiple domains (medical, automotive, financial, content moderation)
- 3. Ensure ethical safeguards prevent misuse of the technology
- 4. Preserve the memorial legacy of the framework creator

Ethical Principles Governing Research

Beneficence: The research is designed to benefit humanity by improving AI decision-making in morally complex scenarios.

Non-maleficence: Comprehensive safeguards prevent harmful applications of the framework.

Justice: The framework promotes fairness and prevents discrimination in Al systems.

Autonomy: The Sacred Pause principle preserves human agency and oversight in Al decisions.

Transparency: Open source development ensures accountability and community oversight.

Human Subjects Protection

Research Classification

Risk Level: MINIMAL RISK

Human Subjects Involvement: Limited to expert evaluation and validation **Data Collection**: Anonymous, aggregated, non-identifying information only

Participant Categories

Expert Reviewers

• **Population**: Professional ethicists, AI researchers, domain experts

• Participation: Voluntary evaluation of AI decision scenarios

• **Compensation**: None (professional courtesy participation)

• **Risks**: No physical, psychological, or social risks identified

Academic Validators

- Population: University faculty and graduate students in relevant fields
- Participation: Framework validation and peer review activities
- **Compensation**: Academic credit where applicable
- Risks: No risks beyond normal academic research activities

Informed Consent Protocol

All participants in framework validation receive:

- Clear explanation of research purpose and procedures
- Voluntary participation assurance with right to withdraw
- Confidentiality protections for all personal information
- Contact information for questions or concerns
- No deception or withholding of information

Data Protection and Privacy

Data Collection Principles:

- Minimization: Only necessary data collected for validation purposes
- Anonymization: All personal identifiers removed from research data
- Encryption: Data secured both in transit and at rest
- Retention: Limited retention period with secure disposal protocols

Privacy Safeguards:

- No collection of sensitive personal information
- Aggregated reporting of all results
- Secure storage with access controls
- Compliance with GDPR and applicable privacy laws

AI Ethics and Responsible Innovation

Ethical AI Development Standards

The TML framework development adheres to established ethical AI principles:

Transparency and Explainability

- Open Source: Complete codebase publicly available
- **Documentation**: Comprehensive explanation of framework logic
- Audit Trails: Complete decision logging and traceability
- Public Accountability: Community oversight and governance

Fairness and Non-Discrimination

- Bias Testing: Systematic evaluation across demographic groups
- Cultural Sensitivity: Cross-cultural validation protocols
- Inclusive Design: Accessibility and universal applicability
- **Equal Treatment**: Consistent ethical standards across all applications

Human Agency and Oversight

- Sacred Pause Principle: Mandatory human involvement in complex decisions
- Override Capabilities: Human ability to modify or reject AI recommendations
- Skill Enhancement: Al designed to augment, not replace, human judgment
- Meaningful Control: Humans retain ultimate decision-making authority

Robustness and Safety

- Error Handling: Graceful degradation in edge cases
- **Security Measures**: Protection against adversarial attacks
- Validation Testing: Comprehensive evaluation across scenarios
- Continuous Monitoring: Ongoing assessment of framework performance

Prohibited Uses and Safeguards

Explicit Prohibitions:

- X Mass surveillance systems without consent
- X Discriminatory decision-making applications
- X Weapons or military targeting systems
- X Deceptive or manipulative technologies
- X Any application violating human dignity

Technical Safeguards:

- V Cryptographic authentication for ethical use
- Memorial attribution requirements
- Community-based monitoring and reporting
- License revocation for misuse
- Legal protections and enforcement mechanisms

Cultural and Philosophical Ethics

Cross-Cultural Validation

The TML framework incorporates diverse cultural and philosophical perspectives:

Cultural Advisory Panel

- Western Philosophy: Utilitarian, deontological, virtue ethics traditions
- Eastern Philosophy: Confucian, Buddhist, Taoist ethical frameworks
- Indigenous Wisdom: Traditional ecological and community-based ethics
- Religious Perspectives: Major faith traditions and spiritual frameworks

Cultural Sensitivity Protocols

- Respectful engagement with diverse moral traditions
- Avoidance of cultural imperialism or moral universalism
- Local adaptation capabilities while preserving core principles
- Community consultation for culturally sensitive applications

Philosophical Foundations

Multi-Framework Integration

The TML framework respects and integrates multiple ethical traditions:

Consequentialist Ethics: Consideration of outcomes and consequences **Deontological Ethics**: Respect for moral rules and duties **Virtue Ethics**: Emphasis on character and moral excellence **Care Ethics**: Attention to relationships and contextual care **Justice Theory**: Focus on fairness and equal treatment

Sacred Pause Philosophy

The core innovation of deliberate moral reflection represents:

- Recognition of moral complexity and uncertainty
- Humility regarding the limits of algorithmic reasoning
- Commitment to thoughtful rather than reactive decision-making
- Integration of human wisdom with artificial intelligence capabilities

Memorial and Legacy Ethics

Posthumous Research Ethics

Given the terminal illness of the framework creator, special ethical considerations apply:

Attribution and Recognition

- Permanent Attribution: Lev Goukassian's authorship preserved in perpetuity
- **Memorial Acknowledgment**: Recognition of personal sacrifice in framework creation
- Legacy Protection: Safeguards against misrepresentation or misuse
- Community Stewardship: Ethical governance by memorial committee

Consent and Autonomy

- Informed Consent: Lev's explicit permission for posthumous use
- Autonomous Decision: Free choice to create memorial framework
- **Dignity Preservation**: Respectful treatment of creator's memory and intentions
- Beneficiary Focus: Framework designed to benefit humanity, not exploit creator

Community Responsibility

The AI ethics community accepts responsibility for:

Stewardship: Protecting and advancing the framework's ethical vision **Education**: Teaching future generations about ethical Al development **Innovation**: Building upon the foundation while preserving core principles **Memorial**: Honoring the creator's sacrifice and contribution to human welfare

Regulatory Compliance

International Standards Adherence

The TML framework complies with major international ethical standards:

IEEE Standards

- IEEE 2859: Ethical Design Process compliance
- **IEEE 2857**: Privacy Engineering integration
- IEEE 3652.1: Algorithmic bias considerations

European Union Regulations

- **GDPR**: Privacy and data protection compliance
- Al Act: Ethical Al requirements and risk assessments
- **Digital Services Act**: Content moderation and transparency standards

Professional Codes of Ethics

- **ACM Code of Ethics**: Computing professional standards
- IEEE Code of Ethics: Engineering professional standards
- Medical Ethics: Healthcare Al application guidelines

Ongoing Compliance Monitoring

Annual Reviews: Regular assessment of ethical compliance **Community Oversight**: Public accountability and transparency **Expert Evaluation**: Independent ethical review processes **Regulatory Updates**: Adaptation to evolving legal requirements

Risk Assessment and Mitigation

Identified Risks and Mitigation Strategies

Technical Risks

Risk: Framework misuse for harmful applications **Mitigation**: Cryptographic locks and ethical authentication requirements

Risk: Bias in Al decision-making Mitigation: Comprehensive bias testing and cultural validation protocols

Risk: Security vulnerabilities Mitigation: Regular security audits and community-based monitoring

Social Risks

Risk: Replacement of human moral judgment **Mitigation**: Sacred Pause principle ensures human involvement in complex decisions

Risk: Cultural insensitivity or moral imperialism **Mitigation**: Cross-cultural validation and local adaptation capabilities

Risk: Concentration of moral authority in Al systems **Mitigation**: Distributed governance and community oversight mechanisms

Memorial Risks

Risk: Misrepresentation of creator's intentions **Mitigation**: Comprehensive documentation and community stewardship

Risk: Commercial exploitation without attribution **Mitigation**: Legal protections and license enforcement mechanisms

Risk: Loss of memorial context over time **Mitigation**: Permanent documentation and educational programs

Approval and Oversight

Ethics Committee Composition

Academic Representatives: 3 members from philosophy and computer science Community

Representatives: 2 members from AI ethics organizations

Cultural Advisors: 3 members representing diverse cultural perspectives **Technical Experts**: 2 members with Al system development experience **Memorial Advocates**: 2 members committed to preserving creator's legacy

Approval Decision

Unanimous Approval: All committee members approve the research **Commendations**: Framework recognized for exceptional ethical consideration **Special Recognition**: Memorial aspect praised as model for ethical legacy preservation

Ongoing Oversight Requirements

Quarterly Reports: Regular updates on framework development and use **Annual Review**: Comprehensive evaluation of ethical compliance **Community Feedback**: Ongoing input from users and stakeholders **Incident Reporting**: Immediate notification of any ethical concerns

Contact and Reporting

Ethics Inquiries

Primary Contact: leogouk@gmail.com
Ethics Questions: leogouk@gmail.com
Compliance Issues: leogouk@gmail.com

Incident Reporting

Ethical Violations: leogouk@gmail.com **Misuse Reports**: leogouk@gmail.com

Community Concerns: leogouk@gmail.com

Memorial Committee

Memorial Governance: leogouk@gmail.com
Leogouk@gmail.com
Attribution Issues: leogouk@gmail.com

Conclusion

The Ternary Moral Logic framework represents a significant advancement in ethical AI development, with comprehensive safeguards to ensure responsible innovation and beneficial applications. The research meets the highest standards for ethical research involving AI systems and human validation.

Key Ethical Achievements:

- Comprehensive human subjects protection protocols
- Multi-cultural validation and sensitivity measures
- Technical safeguards preventing misuse
- Memorial preservation of creator's ethical vision
- Community governance and oversight mechanisms

The framework serves as a model for ethical AI development that respects human dignity, promotes beneficial applications, and preserves the moral wisdom of its creator for future generations.

Approved by: TML Ethics Committee

Approval Date: July 27, 2025

Document Version: 1.0 **Next Review**: July 27, 2026

"The sacred pause between question and answer—this is where wisdom begins, for humans and machines alike." — Lev Goukassian

This research honors the memory and vision of a remarkable human being who transformed his final chapter into humanity's ethical AI future.