Document B

M-CORE — Technical Overview (Non-Implementation)

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1. Architectural Overview

M-CORE is designed as a **hybrid cognitive architecture** consisting of:

- a probabilistic language model (LLM), and
- an external evaluation and governance layer (M-CORE).

Control Loop (Conceptual):
Input → External Evaluation → LLM Processing → Post-Evaluation → Output

This structure introduces deterministic constraints and long-term objectives into otherwise probabilistic systems.

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2. Persistent Evaluation and Learning

Unlike conventional AI systems that rely on session-bound memory, M-CORE employs **persistent outcome evaluation**.

Each interaction contributes to a long-term valuation structure, gradually shaping system behavior in alignment with human-defined objectives.

This process forms an operational representation of professional judgment rather than a replica of human cognition.

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3. Multi-Agent Collaboration

M-CORE supports collaborative configurations in which multiple AI instances:

- operate under shared evaluative constraints,
- pursue aligned objectives,
- and are supervised by domain experts.

This configuration enables comparative reasoning, error detection, and methodological refinement across scientific and creative domains.

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4. Application Domains (Illustrative)

Potential applications include:

- scientific research assistance,

- legal and technical analysis,
- creative collaboration,
- domain-specific expert systems.

These examples are illustrative and non-exhaustive.

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5. Development Direction

Ongoing research explores:

- independent infrastructure deployment,
- custom model hosting,
- controlled sensor integration,
- and laboratory-scale experimental environments.

No timeline or commercial commitment is asserted in this disclosure.

These examples do not imply current implementation or availability.