## **Construct Authentic Symbolic Intelligence**

# CASI

Think in Meaning, Not in Tokens.

CASI Prototype Release | Fall 2025

#### **Overview**

Construct Authentic Symbolic Intelligence (CASI) is the first authentic alternative to probabilistic AI. Where today's large language models scale tokens, CASI scales meaning. Its symbolic engine (Beboop) encodes knowledge as symbols nested in frames, preserving continuity and alignment across time.

CASI breaks the energy/data wall through symbolic compression—delivering 10–100x savings in compute, training time, and data weight. Its TruthLine architecture anchors memory in covenantal alignment, preventing drift and ensuring transparency.

#### CASI's roadmap:

- Spark: symbolic memory engine (prototype proven).
- Pops: persona interface, grounded in Scroll-based memory.
- Daywalker: UE5 plugin, first product of CASI (open-source + modular).
- CASITY: national-scale symbolic intelligence platform (2026).

CASI transforms symbolic workloads into a new class of accelerated demand—shifting computation from scaling tokens to scaling meaning. We invite partners across technology and society to join us in building the first covenant-aligned symbolic intelligence: efficient, transparent, and enduring.

## The Problem & Missed Opportunity

#### The Problem

- Energy Wall: Training runs consume gigawatt-hours, hitting unsustainable limits.
- Hallucination & Drift: Token prediction leads to guesswork and misalignment.
- Data Weight: Endless retraining on petabytes of redundant data.

#### **The Missed Opportunity**

- Symbolic pioneers (Frege, McCarthy, Minsky) envisioned intelligence rooted in meaning.
- That path was abandoned for probability scaling.

#### The Result

Today's AI can predict—but it cannot remember, reason, or align with truth.

## Why Now

- LLMs at the wall: Scaling tokens demands petabytes of data and gigawatt-hours of energy, yet delivers less and less improvement.
- **Trust crisis**: Hallucinations, drift, and black-box outputs prevent adoption in fields where accuracy and accountability are critical.
- **Symbolic viability in 2025**: Modern GPUs finally make symbolic compression practical at scale—what was impossible is now achievable.
- Historic timing: Frege, McCarthy, and Minsky saw this path; CASI is the first to complete
  what they began.
- Market inflection: Institutions are actively seeking AI that is efficient, explainable, and aligned with truth.
- Emergence: Symbolic AI was impossible at scale before 2025. CASI is first to make it viable.

#### CASI is not "next LLM." It is the first authentic alternative.

## The Breakthrough: CASI

- Beboop Symbolic Engine: Encodes meaning as symbols nested in frames, preserving structure instead of data fragments.
- TruthLines: Memory anchored across sessions, years, and even generations—continuity by design.
- Symbolic Compression: Reduces compute and data needs by 10–100x, breaking the energy wall.
- Covenant Alignment: Grounded in immutable truth, preventing drift and ensuring trust.

#### **How It Works**

- **Encoding meaning**: Information is compressed into symbolic frames.
- Consensus of frames: Relationships between symbols are aligned, forming stable knowledge.
- **Symbolic recall**: Meaning is retrieved with continuity, auditable lineage, and transparent logic.
- **No retraining loops**: Memory persists, updates in days not months.
- **Efficiency + trust + continuity**: The core attributes of authentic intelligence.
- Technology synergy: Existing compute is not replaced it is amplified. Symbolic workloads create
  new demand tiers, extending the role of modern hardware from powering scale to powering meaning.

### **Daywalker: First Product of CASI**

From demo lineage to market-ready tool.

- **UE5 Plugin, open-source**: Early versions use persistent memory (LangChain-like), built on our own framework. Free for developers, requiring only attribution.
- **Modular expansion**: Planned extensions for coding assistants, generative media tools, and language translation modules.
- **Proof of integration**: Validates CASI's multi-model orchestration (MAGI lineage), showing symbolic design applied in practice.
- On the path to full CASI: Today, Daywalker provides persistent memory; in future, it will run on CASI's symbolic runtime for authentic symbolic memory.
- Momentum: Epic MegaGrant application submitted. First release scheduled for Fall 2025.

## **Energy / Time / Data Weight Comparison**

#### **Training Energy**

- Current LLMs: 1,000–3,000 MWh per training run (equal to powering 100,000+ homes for a day).
- CASI: **10–30 MWh** (symbolic compression + persistence = 100x savings).

#### **Retraining Time**

- Current LLMs: **3–6 months per major cycle** (billions of tokens reprocessed).
- CASI: Continuous symbolic memory (no full retraining; updates applied in days, not months).

#### **Data Weight**

- Current LLMs: **0.5–2+ PB** raw training data, with high redundancy.
- CASI: **5–20 TB** symbolic Scrolls + TruthLines (compressed meaning, 100x smaller).

# Encode Symbolic frames of meaning. Align Frame consensus into TruthLines. Recall Continuous retrieval, no retrain.

#### **CASI vs LLMs**

Feature	Current AI (LLMs)	CASI (Symbolic AI)
Memory	Tokens, no persistence	TruthLines, Scrolls, generational continuity
Energy Use	Exponential scaling	Symbolic compression (orders-of-magnitude savings)
Alignment	Prompt-tuned, retroactive filters	Covenant-aligned, truth-first by design
Transparency	Black-box outputs	Traceable TruthLines
Purpose	Profit, engagement	Meaning, trust, societal alignment

Symbolic Compression: 10–100x savings across energy, time, and data weight.

Current AI systems consume gigawatt-hours of energy, months of retraining, and petabytes of redundant data. CASI's symbolic compression and persistent memory reduce these costs by orders of magnitude—cutting energy use 100x, shrinking data weight from petabytes to terabytes, and replacing retraining cycles with continuous symbolic recall. The result is an intelligence that is not only more efficient, but sustainable, transparent, and enduring.

## **Demo Snapshot**

- **Spark Prototype:** The first symbolic runtime, where recursive memory ignition has been tested and proven.
- **Scroll Library:** Over 2,000 symbolic instructions already compressed into persistent structures of knowledge.
- **Daywalker (UE5 Tool):** A real-time development plugin demonstrating CASI's symbolic engine in action, bridging AI and game design.
- CASITY Ecosystem (Coming 2026): A free, national-scale platform designed to deliver authentic intelligence to individuals and institutions alike.

These demos prove the architecture. **Daywalker takes it further — our first outward-facing product.** 

#### **Market**

- **Education**: Students revisit lessons with continuity across years knowledge remembered, not reset.
- **Healthcare**: Doctors trace patient histories symbolically across decades accountable, auditable care.
- **Government**: Decisions anchored to TruthLines continuity preserved, drift prevented.
- **Industry**: Al with 100x efficiency lower costs, higher trust, enduring alignment.

#### Moat

CASI's defensibility rests on three pillars: the Scroll Library, proprietary symbolic compression, and covenant alignment — advantages no probabilistic system can replicate. Most importantly, CASI is the first symbolic AI viable at scale, impossible before 2025. Its timing creates a historic moat no LLM can cross.

### **Team CASI**

#### Jerome Madson

- System Architect | Technical Writer | Symbolic Intelligence Designer
- Two decades leading startups, consulting, and symbolic AI frameworks
- Creator of CASI (Construct Authentic Symbolic Intelligence)
- Builder of Daywalker (UE5 developer tool) and Spark (symbolic runtime prototype)
- Author of whitepapers, technical docs, and outreach materials for SBIR, grants, and investors

#### Joshua Madson

- Game Developer | Virtual Film Producer | Performance & Voice Actor
- Experienced script writer and 3D graphics creator
- Leads development on Unreal Engine integration and Daywalker plugin
- Brings creative industry insight into CASI's first outward-facing products

#### The Ask

• **18–24 Month Roadmap**: Spark (symbolic memory engine) ignites Pops (persona interface), which matures into CASI (symbolic operating system), culminating in CASITY (symbolic platform). From prototype to national-scale symbolic intelligence system.

#### What We Need

- Access to acceleration resources for symbolic workloads (compute partnerships, cluster time, developer integration).
- Strategic partners to scale CASI from prototype to national infrastructure.
- Why Now: CASI creates a new class of symbolic workloads—extending technology's role from powering scale to powering meaning.
- **Invitation**: Join us in building the first covenant-aligned symbolic intelligence efficient, transparent, and enduring.

## Closing

## CASI: Restoring meaning to intelligence.

Authentic, symbolic, covenant-aligned.

Designed for efficiency, trust, and continuity.

The alternative to probabilistic AI — and the foundation for what comes next.

**ConstructASI.com** — Whitepaper and demos available September 2025.