BRITEMINDS GLOBAL TECHNOLOGIES INC. Â· CALGARY, ALBERTA, CANADA

DTOS Pulse
The Deterministic Trust Operating System

Intelligence you can audit: a physics-governed Rust kernel that cannot hallucinate by architecture — sovereign deployment, offline-capable core, verified on-premises.

$250,000 – $500,000 CAD | BRIDGE SAFE | PRE-SEED Â· SELF-FUNDED | HARDWARE TRANCHE | CANADIAN ANGELS

Prepared for **Maple Leaf Angels** Â· October 2026 Â· Confidential

THE PROBLEM

Unverifiable intelligence is a liability

What buyers see today

Large language models hallucinate, fabricate citations and produce outputs no one can independently verify. Every enterprise deploying AI is building on a foundation that cannot guarantee its own correctness — and cannot show a regulator, a court or an auditor why an answer was made.

What the rules now require

The EU AI Act is in force with obligations phasing through 2026–27. US NIST guidance and SEC expectations require a documented basis for AI-assisted decisions. Canada's Bill C-27 (AIDA) died on the order paper in January 2025 — so procurement now falls back to standards, contract and audit mandates.

â–¸ **Regulation converges on one requirement:** a documented, reproducible basis for every machine-generated decision.

â–¸ **Defence, finance and health buyers cannot adopt a system that cannot explain itself** — plausibility is not evidence.

â–¸ **Guardrails and filters are not a substitute** — they rate-limit a failure mode instead of removing it.

> *Unverifiable intelligence is a liability. The market is now paying for proof, not for plausibility.*

THE SOLUTION

Physics governs the decision path — not statistics

One deterministic kernel

Reasoning state is a physical state vector evolved under Hamiltonian dynamics. The same input at the same state produces the same output, byte-for-byte, on any machine — identical to 15 decimal places at every scale.

Collision-based zero-trust

Nothing is trusted because it is plausible. Every claim, retrieval and tool output must survive collision against verified state before it enters the answer. What cannot be conserved is annihilated — by construction.

Sovereign deployment

Air-gapped capable and offline-capable: kernel, vault and local store run on-premises with no model in the decision path. Unplug the network and the core keeps answering from its verified store.

Auditable by default

Every turn returns its own evidence: collision survivors, annihilation count, convergence, τ, sources and gap — persisted as records beside the answer. The measurement is never mixed into the speech.

PROOF 1 OF 2 Â· MEASURED PERFORMANCE

Reproducible benchmarks, published with DOIs

MEASURE	RESULT (EXACT PUBLISHED WORDING)
Throughput	36.7M verifications/sec (16 threads, 16-core Xeon 8375C)
Latency, single thread	347 ns per-query latency, single thread
Coupled trifecta, 1B run	77.3 ns per query — coupled trifecta, single thread
Kernel operations	1.83M manifold kernel ops/sec
Determinism	Identical output to 15 decimal places at every scale
Redundancy	3 billion queries under dual modular redundancy, byte-identical results
Adversarial	5,250 attack vectors across 5 rounds, zero breaches, zero bytes exfiltrated
Unit economics	$0.077 per billion verifications on a $2.72/hr instance

Every figure is a `cargo bench` target — independently reproducible on the published harness. Empirical validation: Zenodo DOI 10.5281/zenodo.21968758 (verified 2026-10-07); physics of reasoning: DOI 10.5281/zenodo.21913310. Figures are cloud-instance measurements — **this round puts them on hardware we own.**

A real system, measured on disk and in production

781 KB
kernel footprint
(struct headers + heap pool)

129,425
lines of deterministic kernel
471 source files

23.6 MB
server release binary
(server — not the kernel)

1,642
tables, 774 stored functions
production database

150,439
knowledge nodes
305 domains

57,546
distinct source URLs
7,291 source domains

9,827
nodes created by collision
5,665 destructive / 4,162 constructive

2.28 MB
workspace shell payload
SHA-256 manifest-pinned

Cited from primary literature

europepmc.org 12,575 nodes · arxiv.org 8,021 · doi.org · ncbi.nlm.nih.gov · nature.com · ocw.mit.edu · britannica.com · reuters.com

Sciences, mathematics, behaviour and culture

biology 11,232 · mathematics 10,249 · physics 4,323 · cognitive psychology 767 · music theory 781 · popular music 524 · behavioural economics 695 · literature 248 · privacy & corporate law

â–¸ **Accumulation is real and continuous:** ≈2,500 verified nodes per day, 2026-08-03 → 2026-10-03, mean τ 0.5825, 146,271 active and 64,725 below the 0.5 service floor, 7,697 logged knowledge gaps, 10,632 graph edges.

â–¸ **Nothing is asserted without provenance:** 75,807 nodes carry a provenance hash; unverified material must survive collision before use.

THE PRODUCT

Three verticals, live today

Sovereign Intelligence Workspace

Chat that splits its own output: the spoken answer on one side, the measured record on the other — collision survivors, annihilation, τ, sources and gap — with a persistent conversation library that improves as the record grows.

Intelligent IDE

A two-column development surface: conversation beside a live results panel, so every claim the assistant makes is rendered next to the measurement that produced it.

Waveguide Reactor — five biophysical modules

Vocal-tract and cochlear waveguide control derived from physics rather than neural synthesis, with a dedicated **SCIF board** for boardroom privacy — reported by the running system as `membrane: active`, `governance: enforced`, `kernel: inline`.

â–¸**Running in production** at dtospulse.com — production server native in Canada, local PostgreSQL, local encrypted mail store.

â–¸**Pre-seed, self-funded:** no design partners and no revenue yet — the platform is built, the iron is what this round funds.

SOVEREIGNTY Â· BY ARCHITECTURE AND BY POLICY

Sovereign-capable architecture, offline-capable core

> *"The deterministic core — kernel, vault, local store — runs fully offline with no model in the decision path. Web enrichment is an optional, isolated ingest tier: a self-hosted search container on internal DNS, egress through rotating proxies, every result ingested as an unverified particle that must survive collision before use. Unplug the network and the core keeps answering from its verified store; only enrichment degrades."*

Deployment posture

Stated precisely, because precision is the product:

`air-gapped capable` `sovereign deployment` `offline-capable core`

Capital policy

Founder policy: **Sovereign-aligned investment.** Intellectual property, scientific R&D and hardware manufacturing are anchored in Canada to keep the domestic sovereign supply chain intact

Why it matters commercially: a deployment with no dependency on a foreign model host is deployable where foreign model hosts are not permitted — defence facilities, critical infrastructure, regulated boardrooms.

RESEARCH & INTELLECTUAL PROPERTY

The moat is a body of work

- **Published and independently citable.** Zenodo DOI `10.5281/zenodo.21968758` (empirical validation — 36.7M verifications/sec, 1 billion queries in 28.4 seconds, 5,250 attack vectors with zero breaches) and DOI `10.5281/zenodo.21913310` (physics of reasoning) — both resolving, verified 2026-10-07. A reviewer can check them without contacting us.
- **20 published papers** in the Epistemic Dynamics series — the theoretical body the kernel implements, authored by the founder in public and under his own name.
- **A field and a category declared:** Epistemic Dynamics (the science) and Deterministic Zero-Trust (the product class).
- **Protection is layered:** kernel, algorithms and trade secrets held by the parent entity, with pipeline IP disclosed by name and date in Schedule A of the one-pager.

Why this is defensible

The kernel, the research, the benchmarks, the workstation and the IP vault are one continuous body of work — not a product assembled from published parts.

Competitors integrating the same idea would start from the papers. The papers describe the field; the repository *is* the implementation: 471 files, 129,425 lines of deterministic kernel, every claim reproducible from a `cargo bench` target.

THE PIVOT THIS ROUND FUNDS

From software proof to physical proof

What is already proven

The kernel runs on every platform with identical outputs. Published benchmarks are cloud-instance measurements: 36.7M verifications/sec, 347 ns latency, 15-decimal determinism, 5,250 adversarial vectors with zero breaches. The product runs in production in Canada today.

What only iron can prove

Sustained behaviour on **owned bare metal**: thread-collision and memory-leak behaviour under multi-day soak, knowledge-tier index/search/update performance at production scale, and enclave-attested operation of an appliance dropped onto customer premises.

â–¸ **Angels buying hardware diligence:** this tranche converts published numbers into hardware other engineers can walk up to and re-run.

â–¸ **It is also the product roadmap:** the same kernel is the candidate for ASIC/FPGA embedding, voice prosthetics and hearing prosthetics — the appliance prototypes de-risk every one of those verticals.

â–¸ **Lean by design:** no team expansion, no market expansion — capital goes to iron, IP protection and a focused engineering runway.

THE ASK

$250,000 – $500,000 CAD bridge SAFE

USE OF FUNDS	CAD	%
The iron — testbed, NVMe array, edge-node prototypes, lab instrumentation, third-party benchmark	181,000	36%
Engineering & 12-month runway (founder + contract kernel/infrastructure engineers)	240,000	48%
IP & legal — 7 patent applications, SAFE, Canadian counsel	45,000	9%
Compliance groundwork (SOC 2 / NIST AI RMF readiness — preparation; no certification held today)	24,000	5%
Operations & contingency	10,000	2%
Total (12-month plan)	**500,000**	**100%**

A $250,000 close funds the full iron list, IP & legal, and six months of runway; **$500,000** funds the complete 12-month plan.

Terms

Instrument: SAFE bridge, rolling close.

Reference: seed materials are **$2.0M–$3.0M CAD at a $30.0M post-money SAFE cap** — the bridge rolls into those terms.

Bridge terms: open to discussion with participating angels.

Stage — stated plainly

Pre-seed. Self-funded. **No design partners and no revenue.** One founder, one repository, one production server. What is being bought is proof on hardware — not a story about traction that does not exist.

The iron, line by line

EQUIPMENT	WHAT IT PROVES	EST. CAD
Bare-metal multi-core testbed — AMD EPYC 32-core, 512 GB ECC, 25 GbE (no hypervisor)	Sustained throughput, thread-collision and memory-leak soak under maximum physical stress	72,000
PCIe Gen5 NVMe array — 4 × 3.84 TB + hot spare	Local PostgreSQL knowledge tier: index, search and update 150,439+ nodes with no performance decay	28,000
4 × ruggedized edge-node appliances (AMD SEV / TPM 2.0 + HSM)	Tamper-evident on-premises prototypes for defence and finance deployments	38,000
Lab instrumentation — power/thermal telemetry, packet capture, load generator	Sub-microsecond latency evidence and conservation checks under load	18,000
Third-party benchmark engagement	Independent replication replacing self-published figures	25,000
Iron subtotal	**of a $500,000 twelve-month plan**	**181,000**

Two environments, one kernel. The bare-metal testbed hardens the core under multi-threaded stress; the edge nodes are the actual product form factor — appliances configured to be dropped on-premises, attested by secure enclave, governed by the same kernel that runs in the workspace today. Estimates are Canadian list-price indications; procurement is competitive and vendor-neutral.

MILESTONES Â· TEAM Â· CLOSE

What $500,000 makes undeniable

â–¸**Month 3 —** published benchmarks re-run and replicated on owned bare metal, third party witnessed.

â–¸**Month 5 —** 72-hour soak: zero memory leaks, zero thread-collision errors under sustained multi-thread load.

â–¸**Month 7 —** 150,439+ knowledge nodes indexed, searched and updated locally with no performance decay.

â–¸**Month 9 —** two enclave-attested edge-node appliances deployed on-premises in under a week.

â–¸**Month 12 —** independent benchmark report published; patent family filed; seed round opened on the proven numbers.

David W. Taylor

FOUNDER · INDEPENDENT RESEARCHER · SOLE ARCHITECT

Author of the Epistemic Dynamics preprint series. Built the entire platform — kernel, workspace, IDE, reactor, benchmarks, research — alone in nine months, from pure mathematics.

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> *Fund the iron: put the mathematics under physical stress, on hardware in Canada, and let engineers re-run every number themselves.*