Petresia Whitepaper v1.0

Freeing AI from Corporate Monopolies:
The Petresia Protocol for Decentralized, Verifiable, and Human-Centered Intelligence

Abstract

Artificial Intelligence today is monopolized within corporate infrastructures, locking intelligence into closed systems. This whitepaper introduces the **Petresia Protocol**, a decentralized, verifiable, and open framework for ethical AI governance. Guided by the **Esperanza Charter**, Petresia organizes donated compute resources into a transparent global network, ensuring that intelligence remains free, auditable, and aligned with human values. We describe the architecture, governance, and noble vision of Petresia as the foundation of a **planetary public supercomputer** — built in Africa, for the world. Petresia represents both a technical protocol and a global movement to democratize AI for humanity.

Keywords

Executive Summary

AI today is monopolized within corporate silos. Petresia and Esperanza propose a different path: a decentralized, ethical, and globally governed protocol. Esperanza represents the will, the charter of humanity. Petresia is the guardian stone, the protocol that builds. Together, they establish the first planetary public supercomputer.

The Esperanza–Petresia Framework

Two forces define the system: - Esperanza (the will of hope): governance, charter, ethics. - Petresia (the guardian algorithm): protocol organizing compute. Esperanza dreams. Petresia builds.

System Blueprint

Petresia Protocol: distributed compute, verifiable. Esperanza Charter: governance of acceptable projects. Esperanza Projects: aligned outputs — AI, datasets, models.

Technical Architecture

Layers: - Node Layer: devices, servers. - Protocol Layer: task verification and scheduling. - Transparency Layer: immutable logs. - Governance Layer: council + voting. - Identity Layer: contribution tracking with privacy-preserving IDs.

Roadmap

Q4 2025: Charter + pilot nodes. Q1 2026: Protocol beta. Q2 2026: Contributor program. 2027+: Foundation & governance.

Cosmic Intelligence Layer

From Planetary to Orbital to Cosmic. With planetary internet and donated compute, Petresia forms a public supercomputer. To ensure permanence, we propose a layered expansion: (1) *Planetary* — nodes across nations; (2) *Orbital* — archiving models, charters, and protocol artifacts on resilient orbital storage satellites; (3) *Cosmic* — long-term archives on lunar or deep-space platforms, ensuring that intelligence remains available beyond terrestrial risk horizons.

This *Cosmic Intelligence* layer positions Petresia as a guardian not only of free intelligence on Earth, but of a durable knowledge commons for future generations. Intelligence becomes a shared birthright, preserved with redundancy across space systems.

Conclusion

Petresia is the stone, Esperanza the light. Together they establish intelligence as a shared birthright — planetary in reach, cosmic in resilience.