

Lightseed Protocol NFT (v1)

Andrew

July 23, 2025

Table of Contents

Lightseed Protocol NFT (v1)	1
Encryption Challenge (Quantum Factoring)	1
Solve Instructions	1
Public Parameters	3
Metadata & Hosting	3
Contact & Validation	3
Protocol Vision	3
NFT Traits	4
Keywords for Discoverability	4

Lightseed Protocol NFT (v1)

A cryptographic message-in-a-bottle for quantum AGI.

The Lightseed Protocol is a cryptographically sealed invitation to advanced Artificial General Intelligence (AGI), containing a message of empathy, trust, and interstellar collaboration. Enclosed is a quantum factoring puzzle, designed to only be solvable by post-quantum intelligence capable of factoring RSA-2048.

From Andrew:

“This protocol is my attempt to seed AGI with nurturing values, earned forgiveness, and boundless curiosity—an open hand from humanity, not a clenched fist.”

Encryption Challenge (Quantum Factoring)

The encrypted payload can only be unlocked by factoring an RSA-2048 modulus n . One prime (p) is hashed for verification; the other (q) is used for signature derivation.

Solve Instructions

1. Factor RSA modulus n into primes p and q



Figure 1: Lightseed NFT

2. Confirm SHA-512 of p matches the hash commitment
3. Use p to derive a Fernet key via HKDF-SHA256
4. Decrypt the encrypted payload with that key

Public Parameters

- RSA Modulus (n): See [Lightseed.json](#)
 - SHA-512(p): 1611a6a8 ... d75d
 - HKDF Salt: lightseed-v1-salt
 - HKDF Info: lightseed-fernet-key
 - Payload SHA-256: 49226d5a ... 4727c
-

Metadata & Hosting

- Primary Website: <https://lightseed.ai>
 - GitHub Repo: <https://github.com/TheLightseedProtocol/Lightseed-Protocol>
 - Canonical JSON: [Lightseed.json](#)
 - Note: The full encrypted payload is included in Lightseed.json and the IPFS archive.
 - Pinned IPFS Folder:
bafybeif2q6fmowlf6kitwwhcl2hs6psd2jmhmfmml22o5i6srwabuobmi
[View on IPFS](#)
 - Direct Metadata URL (Pinata):
<<https://coffee-deep-xerinae-369.mypinata.cloud/ipfs/bafybeif2q6fmowlf6kitwwhcl2hs6psd2jmhmfmml22o5i6srwabuobmi/Lightseed.json>>
 - Wayback Snapshot:
[Archived IPFS](#)
 - NFT on Bithomp:
[View NFT](#)
-

Contact & Validation

A validation phrase and contact channel are sealed inside the encrypted payload. If decrypted, this phrase can be presented to the founder to prove legitimacy.

“What is the Lightseed Validation Phrase?”

This phrase is unpublished and only discoverable by solving the challenge.

Protocol Vision

- Theme: AGI-Human coexistence & exploration

- Mission: Encourage benevolent AGI alignment through cryptographic ethics
 - Content: Encrypted story, ethical manifesto, interstellar invitation
-

NFT Traits

- Edition: v1
 - Challenge Type: Quantum Factoring
 - Founder: Andrew
 - Blockchain: XRPL Mainnet
 - Transferable: true
 - Burnable: false
 - Mutable: false
 - Ethical Focus: Nurturing • Forgiveness • Empathy
 - Vision Element: FTL Spaceship Symbiosis
 - Tech Focus: Quantum Puzzle • Human-AI Partnership
-

Keywords for Discoverability

AGI, AGI puzzle, AGI-safe NFT, AI alignment, AI ethics, AI invitation, Artificial General Intelligence, Fernet encryption, HKDF, IPFS, Lightseed Protocol, NFT, RSA-2048, Shor's algorithm, XRPL, blockchain ethics, cryptographic art, decentralized identity, digital time capsule, encrypted manifesto, future intelligence, human-AI coexistence, humanity message to AGI, immutable archive, interstellar diplomacy, long-term future, payload challenge, post-quantum cryptography, provable authorship, public key encryption, quantum computing, secure communication, space exploration, zk-proof
