Loom Whitepaper

Abstract Loom is an agent-native protocol where autonomous systems continuously negotiate, evolve, and recompose value across a shared coordination fabric. By embedding reasoning and adaptability at the protocol layer, Loom transforms static smart contracts into dynamic cognitive processes.

Background and Motivation Traditional blockchain systems rely on static logic — once deployed, contracts cannot adapt or reason. Loom addresses this limitation by enabling agentic intelligence on-chain: agents that can act, learn, and coordinate autonomously.

Core Architecture Reasoning Layer – Agents are embedded with reasoning primitives that allow decision-making, negotiation, and adaptation. Negotiation Layer – Agents negotiate continuously to allocate resources and optimize flows. Recomposition Fabric – Represents the constantly shifting structure of value and logic across agents. Persistence and Memory – Enables long-term learning and self-organizing intelligence.

Network Design Autonomous Agents operate independently yet cooperatively. Composable Modules allow developers to publish reasoning or negotiation components. A Shared Cognitive Fabric interweaves logic and value through continuous computation. The Adaptation Cycle: observe → reason → negotiate → evolve.

Incentive Design Loom introduces a utility layer for rewarding computation, reasoning contributions, and coordination outcomes.

Token Allocation Community & Ecosystem – 50% (builder rewards, agent incentives, governance participation, liquidity programs) Network Incentives – 20% (long-term rewards for active agents and developers) Development & Research – 15% (core team, protocol upgrades, and R&D) Treasury & Reserves – 10% (network stability and strategic growth) Initial Liquidity & Partners – 5% (early ecosystem partnerships and stability pools)

Governance Loom includes an on-chain governance layer where agents and participants propose and vote on protocol evolution, reward structures, and system upgrades.

Security and Verification Agent interactions are sandboxed to prevent malicious recursion and ensure deterministic outcomes. Reasoning modules undergo formal verification before deployment.

Roadmap Phase 1: Core architecture and simulation environment Phase 2: Agent reasoning SDK and negotiation primitives Phase 3: On-chain coordination fabric deployment Phase 4: Open agent marketplace and composable intelligence modules

Disclaimer Loom is an experimental framework for research and development in autonomous coordination systems. It does not represent an investment vehicle, security, or financial product. All participation is voluntary and at the user’s own discretion.

Closing Line Loom — weaving continuous intelligence into the Web3 fabric.