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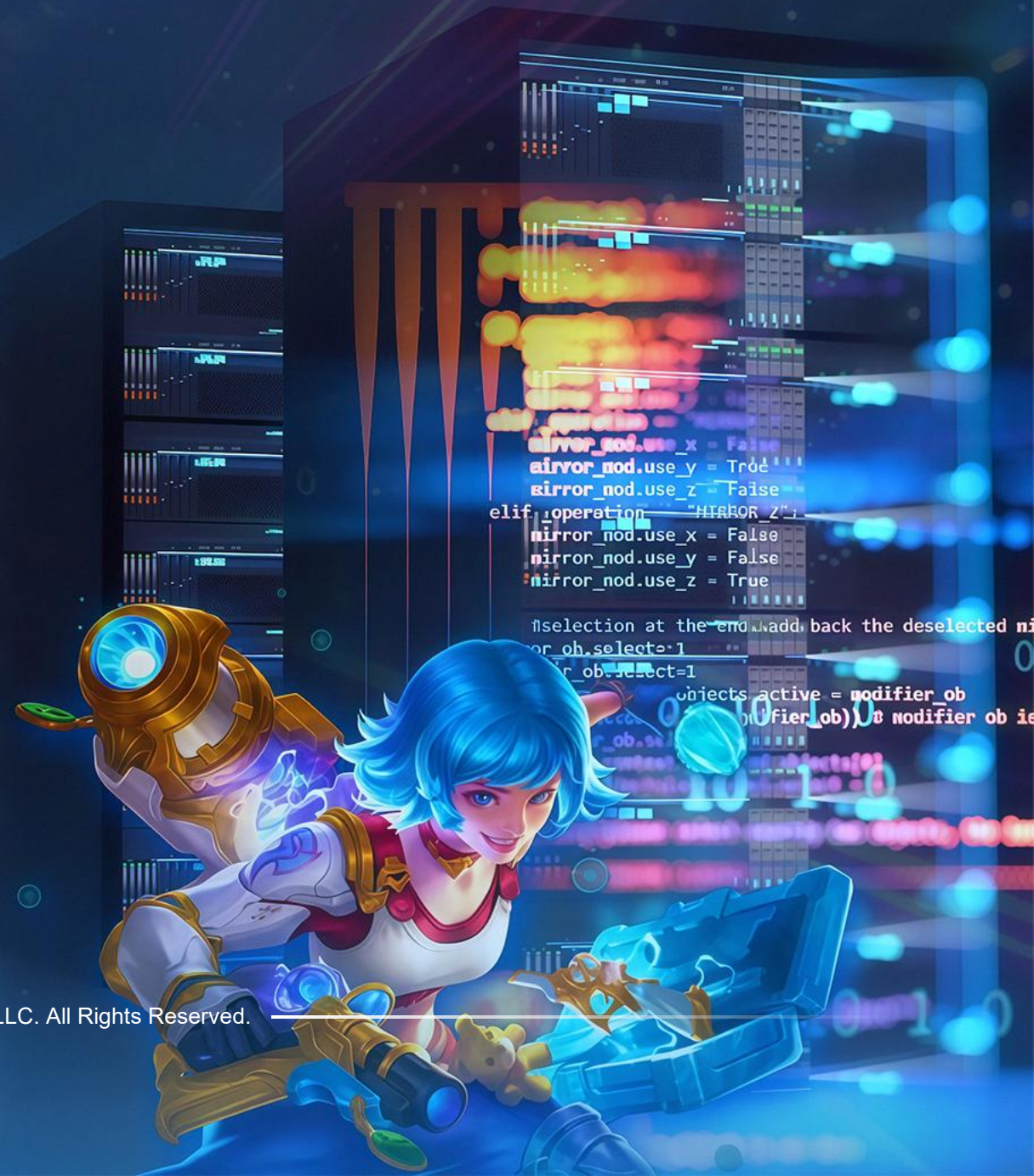
Agentic AI Cluster Harvesting System Technology White Paper

Based on non-intrusive perception and bare-metal sovereignty, the virtual productivity industrialization protocol



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AGENTIC AI CLUSTER ADOPTS A HIERARCHICAL AUTONOMOUS ARCHITECTURE FOR DATA COLLECTION.

Realize the closed loop from "computing resources" to "digital assets"

Infrastructure layer

Relying on the computing power of CoreWeave B200, achieve driver-level HWID injection and physical sovereignty isolation.

Visual perception layer

Non-intrusive ViT engine, achieving pixel-level semantic decomposition and three-dimensional space modeling.

Cognitive decision-making level

The autonomous AI brain, responsible for the decomposition of goals across different scenarios and the control of behaviors.

Cluster orchestration layer

The distributed Gossip protocol and 1:500 steady-state scheduling enable industrial-level concurrency.

Establishing ANIMO's "technical and physical sovereignty" through full-chain isolation ensures the "impenetrability" of the production line.

INTELLIGENT DECISION ENGINE: GOAL-DRIVEN AGENTIC AUTONOMOUS MECHANISM

The system no longer relies on preset scripts but instead processes the dynamic environment through an autonomous cycle of "perception - evaluation - action" (PEA Loop).

Underlying formula: $$J(\phi) = \mathbb{E}_{\pi}\left[\sum_{t=0}^{T} \gamma^t R(s_t, a_t, g)\right]$$

Engineering implementation:

Meta-Controller

Responsible for setting the long-term target g (such as obtaining the most valuable assets within a specific period)

Sub-Controller

Responsible for generating action sequence at the millisecond level (such as: path planning, obstacle avoidance)

The essence of the management leverage has been achieved through this breakthrough.AI possesses the self-healing ability to handle 99.8% of emergencies, supporting an industrial-level management ratio of 1:500.

VISUAL PERCEPTION LAYER: VIT NON-INTRUSIVE PIXEL DISASSEMBLY ENGINE

Based on the Vision Transformer (ViT) architecture
multi-head self-attention is utilized to directly extract pixel features from the frame buffer.

Underlying formula: $$Attention(Q, K, V) = softmax\left(\frac{QK^T}{\sqrt{d_k}}\right)V$$

Engineering implementation:

The screen is divided into 16 x 16 patches, and the asset positions, UI progress, and environmental variables are labeled with sub-second accuracy through the multi-head attention mechanism.

Physical-level anti-detection
The algorithm merely "observes" the image without accessing the memory, completely immune to account-blocking techniques based on memory scanning.

SPATIAL GEOMETRY: NON-INTRUSIVE COORDINATE MAPPING ALGORITHM

By using monocular vision ranging and inverse projection transformation
the 2D pixels on the screen are real-time mapped to the 3D logical coordinates of the virtual world.

Underlying formula: $P_{world} = K^{-1} \cdot R \cdot p_{pixel}$

Engineering details:

Calculate the target displacement and promptly correct the "distance perception" of the AI, ensuring that the operation is bit-level precise in the 3D complex terrain.

Behavioral personification
Eliminates the "stalling" and "blocking" characteristics of traditional scripts, significantly enhancing the production success rate.

SPATIAL GEOMETRY: NON-INTRUSIVE COORDINATE MAPPING ALGORITHM

Based on the Decision Transformer (DT) architecture
The global 500 million hour-level operation trajectories undergo behavioral tokenization processing.

Underlying formula: $\mathcal{L}(\theta) = \mathbb{E}_{T\sim D}\left[\sum_{t=1}^{T} log\pi_\theta(a_t \mid s_t, rtg_t)\right]$

Engineering details:

Data distillation

Using self-supervised learning (SSL), 500 million hours of raw trajectories are compressed into high-dimensional behavioral feature fingerprints.

Strategy alignment

Through offline reinforcement learning (Offline RL), the AI can instantly invoke similar behavioral templates when entering a new environment, achieving immediate production.

The "universal applicability" of production efficiency has been achieved. 500 million hours of data have endowed AI professional players with intuitive decision-making abilities.

ACTION REALISM: THIRD-ORDER BEZIER KINEMATIC CONTROL

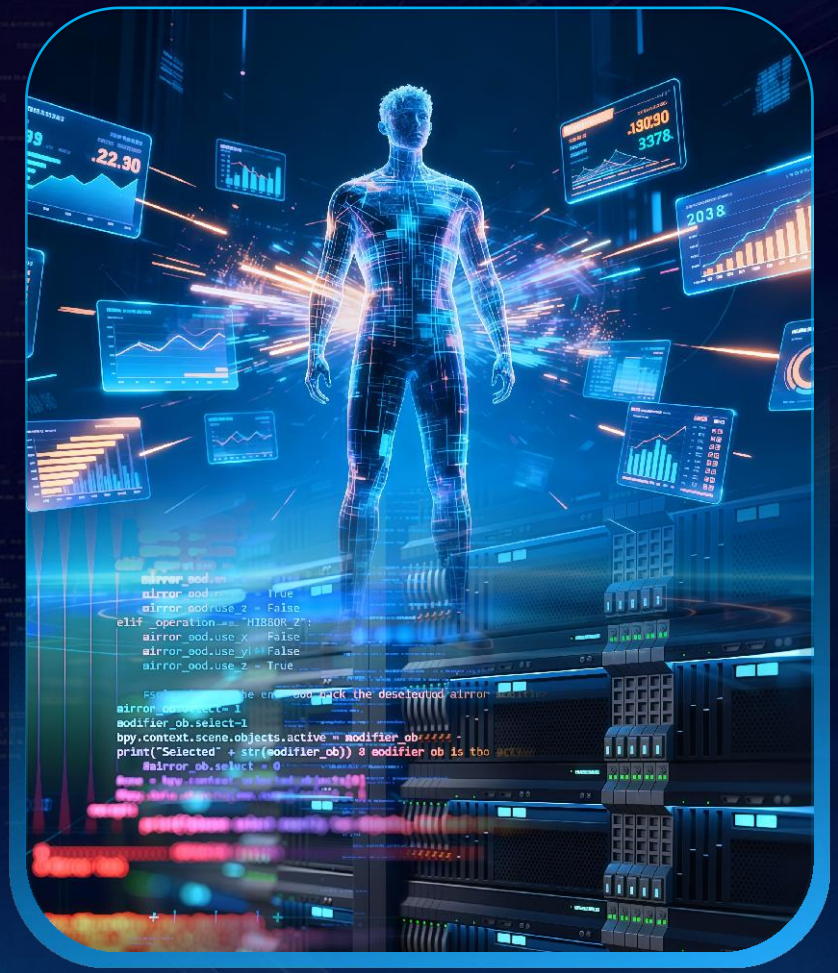
A nonlinear trajectory generation algorithm based on biomechanics simulates the acceleration and deceleration characteristics of hand muscles.

Underlying formula:

$$\boldsymbol{B}(t)=(1-t)^3\,\boldsymbol{P}_0+3(1-t)^2t\boldsymbol{P}_1+3(1-t)t^2\boldsymbol{P}_2+t^3\boldsymbol{P}_3$$

Engineering details:

Inject random micro-jitter that conforms to human physiological characteristics, following a $N(\mu, \sigma^2)$ distribution, to eliminate uniform motion.



Zero-risk cross-border behavior audit. The operation trajectory statistically exhibits the characteristics of independent and genuine human players.

PHYSICAL SOVEREIGNTY: COREWEAVE BARE METAL-LEVEL HARDWARE TAMPERING

Modify the HWID at the driver layer by leveraging physical sovereignty to achieve $f(P_{Coreweave}) \rightarrow \{HWID_i\}$ Mapping.

Engineering details:

Simulate the B200 as hundreds of workstations each with an independent BIOS serial number, graphics card UUID, disk ID and network card MAC.

CoreWeave

Immovable technical barriers

Completely solve the pain point of cloud servers being identified in batches, ensuring the absolute security of the asset output environment.

TRAFFIC HEDGING: RESIDENTIAL-LEVEL DISTRIBUTED EDGE NETWORK

The network layer disassociation technology under the private encryption tunnel protocol simulates the characteristics of home broadband traffic.

Engineering details:

Simulate the characteristics of TTL, delay jitter (Jitter), and activity fluctuations, making the traffic characteristics completely realistic.

Eliminate the risk of IP concentration

The production nodes are completely decentralized from the perspective of the operator, ensuring the compliance appearance of large-scale clusters

CLUSTER ORCHESTRATION: 1:500 STEADY-STATE MANAGEMENT LEVERAGE AGREEMENT

**Based on the distributed state machine,
a high-concurrency scheduling protocol is adopted, which, in conjunction with the Gossip protocol, enables node monitoring.**

Underlying formula: $$N = \frac{T_{Total}}{T_{Monitor} \cdot (1 - \alpha) \cdot f}$$

Engineering details:

By increasing the AI autonomy rate α, the time for manual intervention can be reduced. The 1:500 lever has passed industrial-level pressure tests.

The ultimate financial model has significantly diluted the labor costs by a logarithmic scale, serving as the core financial foundation that supports a market value of tens of billions in 2028.

PERFORMANCE OPTIMIZATION: TENSORRT OPERATOR ACCELERATION FOR B20

The FP8 low-bit quantization inference acceleration engine specifically tailored for the NVIDIA Blackwell architecture.

Engineering details:

Deeply optimized the Transformer attention mechanism operator, reducing the visual parsing delay from 40ms to below 8ms. Through the memory pool algorithm for memory fragmentation recovery, the memory usage of a single agent was reduced by 60%, and the computing throughput of a single machine was increased by 300%.

Maximizing hardware performance

With the same computing power rental cost, the output efficiency is increased by 3 times, significantly reducing infrastructure expenses.

EXCEPTIONAL RECOVERY: AN ENVIRONMENT SELF-HEALING ALGORITHM BASED ON HMM

Using the Hidden Markov Model, real-time inference of hidden variables in the virtual environment is carried out.

Underlying formula: $P(O_t \mid \lambda) = \sum_q P(O_t \mid q_t, \lambda) P(q_t \mid \lambda)$

Engineering details:

When network fluctuations or environmental changes cause the interruption of AI logic, the system uses the Viterbi algorithm to trace back to the optimal hidden state before the interruption, enabling millisecond-level breakpoint resuming of transmission without the need for manual process restart.

Achieved a system production online rate of 99.99%
Completely resolved the common problems of deadlock, error reporting and output interruption in automated production.

EVOLUTIONARY ALGORITHM: RECURSIVE SELF-GAME

In the mirrored sandbox environment, introduce the adversarial generative learning logic to achieve autonomous iteration of strategies.

Underlying formula: $\boldsymbol{\theta_{t+1} = \theta_t + \alpha \nabla_\theta \mathbb{E}_{\pi\theta}[R(T)]}$

Engineering details:

The Agent conducts millions of rounds of self-combat drills in the off-chain replica. The system employs the asynchronous gradient update (A3C) technology to iteratively generate harvesting paths that are superior to those of human experts within 24 hours.

Ensured absolute leadership in the production strategy
Regardless of how the rules of the virtual economy evolve, ANIMO always maintains the most efficient path for wealth generation.

GLOBAL DEFENSE: COLLECTIVE IMMUNITY UNDER THE GOSSIP PROTOCOL

A real-time threat intelligence synchronization network based on weak consistency and distributed protocol (Gossip Protocol).

Engineering details:

When any node worldwide detects a new type of verification code, anti-crawling audit features or abnormal account status, the system will broadcast the "feature patch" to all global nodes within 200 milliseconds via the P2P network.

Maximizing the resilience of the cluster enables ANIMO to possess a collective immunity similar to that of a biological community, converting the risk of a single node into an incremental protection for the entire network.

ALGORITHM DISTILLATION: FROM PRIME'S LEADERSHIP TO NEXUS'S EDGE GRIDS

Utilize knowledge distillation and model quantization to achieve the edge-side migration of large models.

Engineering details:

The 10B-level perception model on B200 was distilled into a lightweight Student Model, and INT8 quantization was performed on it to enable its operation on individual personal graphics cards or even on mobile SoCs.

Realized the potential for unlimited expansion

Utilized fragmented computing power across the globe for harvesting, providing the core rocket engine for the subsequent Nexus grid expansion.

EFFICIENCY REDUNDANCY: CROSSING PATH FROM 1:500 TO 1:200

Utilize knowledge distillation and model quantization to achieve the edge-side migration of large models.

Engineering details:

By introducing a larger-scale behavioral base model, it is predicted that the frequency of human intervention will decrease to once per week by 2027. At that time, the management leverage will naturally increase from 1:500 to 1:2000.

There is a huge potential for profit growth. As algorithms evolve, the management cost per unit of output will decrease exponentially.

THE ULTIMATE OF TECHNOLOGY: 1:500 STABLE FOUNDATION AND 1:N ELASTIC REDUNDANCY

ANIMO defines the current industry
ceiling at a ratio of 1:500 and the future productivity sovereignty at a ratio of 1:N.

Steady-state standard - 1:50

This is the financial foundation of ANIMO's productivity.
It ensures the achievement of the 210,000 node target in 2028 and serves as a practical support for the predicted market value of 10 billion US dollars.

Efficiency Surplus - 1:2000+

This is the excess benefit brought about by algorithmic evolution.
This redundant efficiency acts as the "safety cushion" of the system,
not only used to hedge against environmental risks, but also serving as a potential breakthrough point for future improvement in the return on equity (ROE) for shareholders.

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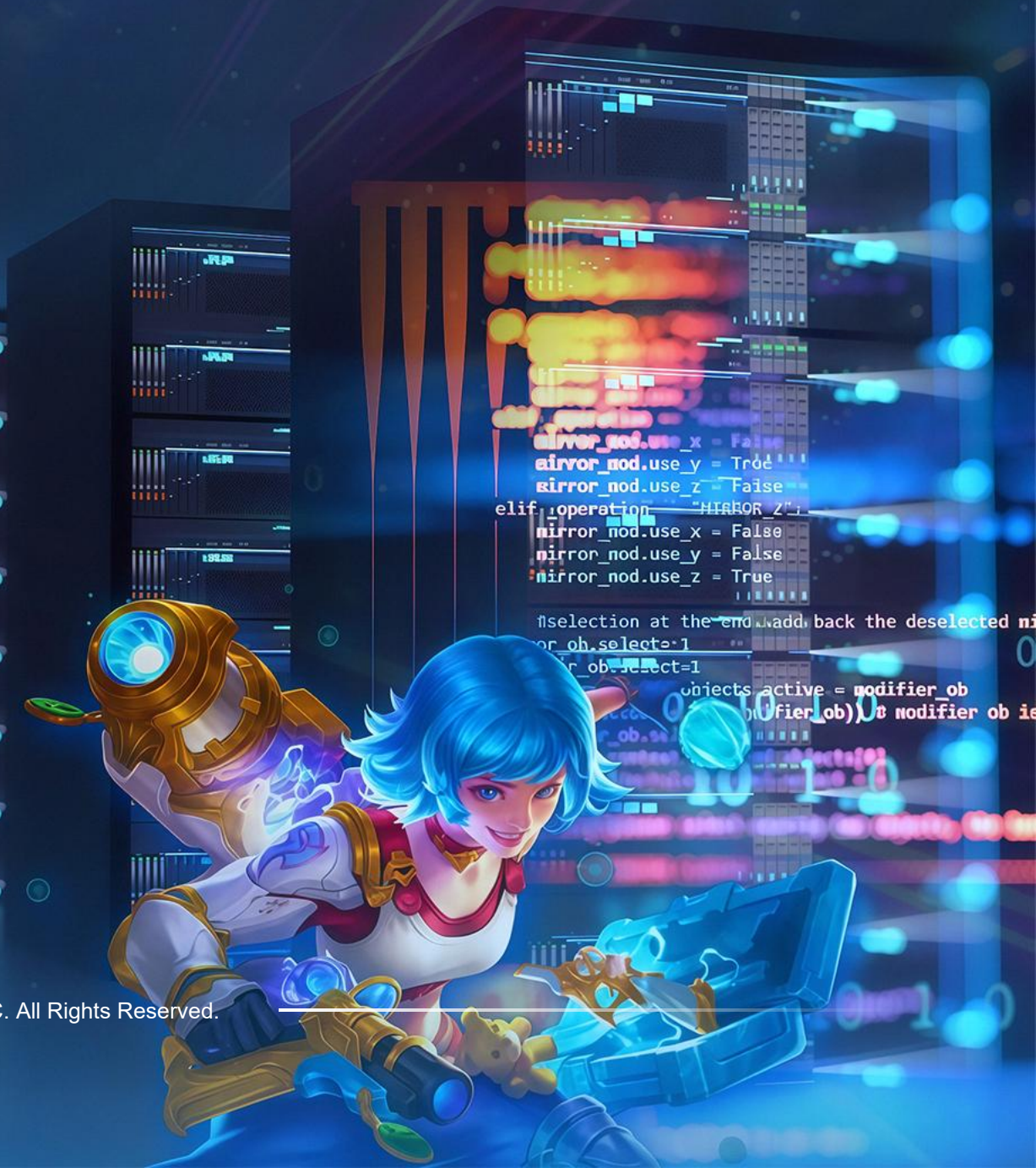
Empower every bit of computing power and reshape every bit of value.

Build a global leading virtual productivity infrastructure operator.



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