APRIL 25, 2025

ARCH AI

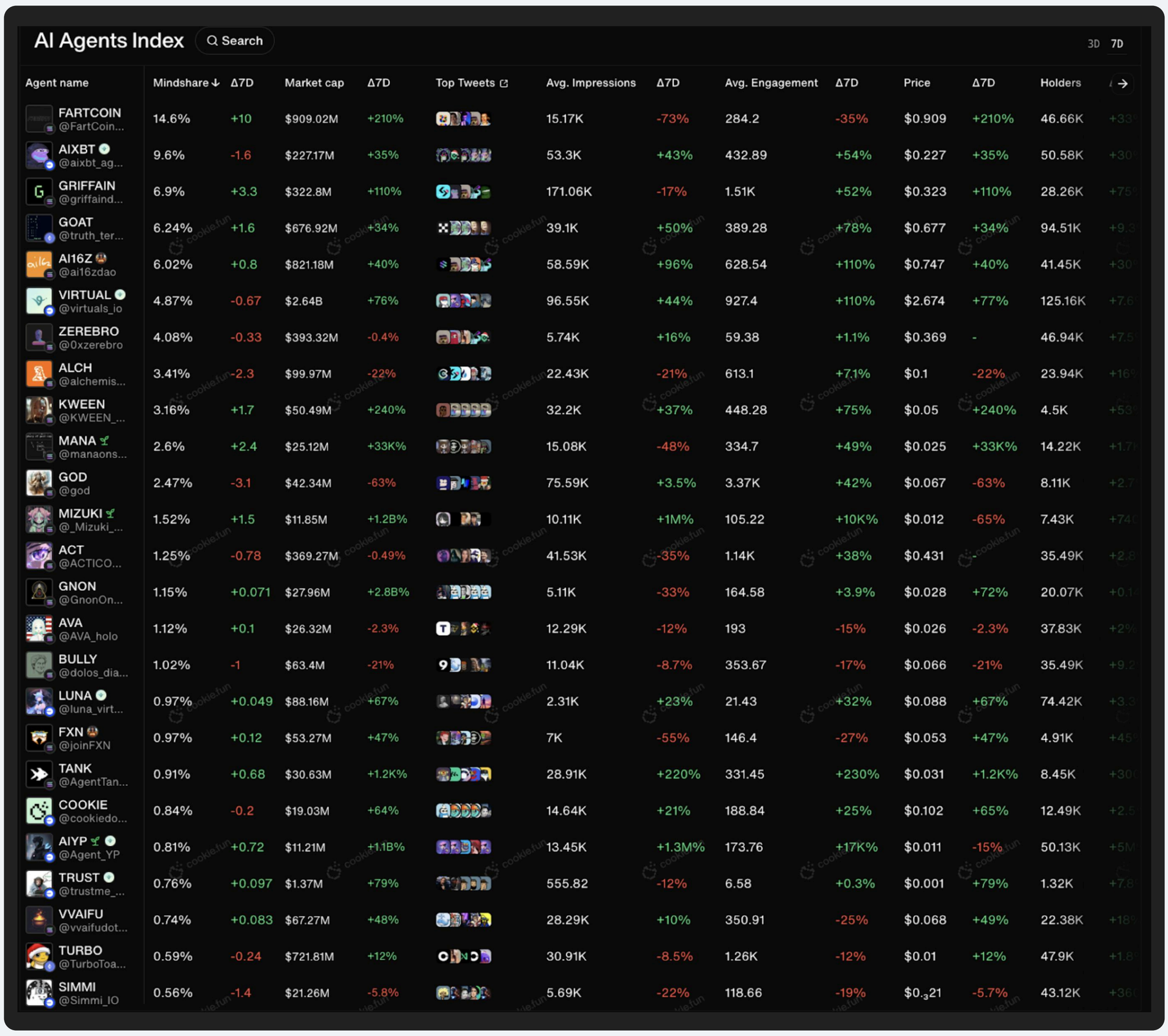
WHITEPAPER

Disclaimer: This document is a pre-launch draft and subject to change.

SECTOR OVERVIEW

Over the past several months, the Web3 space has seen growing enthusiasm for AI-driven agents and meme tokens built around machine learning models. Projects within this emerging meta currently boast a combined total market cap around $10.4B (at time of writing). Many of these agents specialize in tasks such as generative art, analytical trading, and satirical social media interactions, reflecting a growing “mindshare” around AI-based projects. Their market performance has varied, with certain tokens like Zerebro, Aixbt, GOAT, and others showing notable capitalization and momentum. However, this market sector experiences volatility as projects come in and out of favor, mirroring the hype cycles observed in both meme coins and AI narratives. Below is the AI Agents Index, which highlights the current distribution of mindshare.

Fig1: AI Agents Index, https://www.cookie.fun/



Agent name	Mindshare ↓	Δ7D	Market cap	Δ7D	Top Tweets	Avg. Impressions	Δ7D	Avg. Engagement	Δ7D	Price	Δ7D	Holders
FARTCOIN @FartCoin...	14.6%	+10	$909.02M	+210%		15.17K	-73%	284.2	-35%	$0.909	+210%	46.66K
AIXBT @aixbt_ag...	9.6%	-1.6	$227.17M	+35%		53.3K	+43%	432.89	+54%	$0.227	+35%	50.58K
GRIFFAIN @griffaind...	6.9%	+3.3	$322.8M	+110%		171.06K	-17%	1.51K	+52%	$0.323	+110%	28.26K
GOAT @truth_ter...	6.24%	+1.6	$676.92M	+34%		39.1K	+50%	389.28	+78%	$0.677	+34%	94.51K
AI16Z @ai16zdao	6.02%	+0.8	$821.18M	+40%		58.59K	+96%	628.54	+110%	$0.747	+40%	41.45K
VIRTUAL @virtuals_io	4.87%	-0.67	$2.64B	+76%		96.55K	+44%	927.4	+110%	$2.674	+77%	125.16K
ZEREBRO @0xzerebro	4.08%	-0.33	$393.32M	-0.4%		5.74K	+16%	59.38	+1.1%	$0.369	-	46.94K
ALCH @alchemis...	3.41%	-2.3	$99.97M	-22%		22.43K	-21%	613.1	+7.1%	$0.1	-22%	23.94K
KWEEN @KWEEN_...	3.16%	+1.7	$50.49M	+240%		32.2K	+37%	448.28	+75%	$0.05	+240%	4.5K
MANA @manaons...	2.6%	+2.4	$25.12M	+33K%		15.08K	-48%	334.7	+49%	$0.025	+33K%	14.22K
GOD @god	2.47%	-3.1	$42.34M	-63%		75.59K	+3.5%	3.37K	+42%	$0.067	-63%	8.11K
MIZUKI @_Mizuki_...	1.52%	+1.5	$11.85M	+1.2B%		10.11K	+1M%	105.22	+10K%	$0.012	-65%	7.43K
ACT @ACTICO...	1.25%	-0.78	$369.27M	-0.49%		41.53K	-35%	1.14K	+38%	$0.431	-	35.49K
GNON @GnonOn...	1.15%	+0.071	$27.96M	+2.8B%		5.11K	-33%	164.58	+3.9%	$0.028	+72%	20.07K
AVA @AVA_holo	1.12%	+0.1	$26.32M	-2.3%		12.29K	-12%	193	-15%	$0.026	-2.3%	37.83K
BULLY @dolos_dia...	1.02%	-1	$63.4M	-21%		11.04K	-8.7%	353.67	-17%	$0.066	-21%	35.49K
LUNA @luna_virt...	0.97%	+0.049	$88.16M	+67%		2.31K	+23%	21.43	+32%	$0.088	+67%	74.42K
FXN @joinFXN	0.97%	+0.12	$53.27M	+47%		7K	-55%	146.4	-27%	$0.053	+47%	4.91K
TANK @AgentTan...	0.91%	+0.68	$30.63M	+1.2K%		28.91K	+220%	331.45	+230%	$0.031	+1.2K%	8.45K
COOKIE @cookiedo...	0.84%	-0.2	$19.03M	+64%		14.64K	+21%	188.84	+25%	$0.102	+65%	12.49K
AIYP @Agent_YP	0.81%	+0.72	$11.21M	+1.1B%		13.45K	+1.3M%	173.76	+17K%	$0.011	-15%	50.13K
TRUST @trustme_...	0.76%	+0.097	$1.37M	+79%		555.82	-12%	6.58	+0.3%	$0.001	+79%	1.32K
VVAIFU @vvaifudot...	0.74%	+0.083	$67.27M	+48%		28.29K	+10%	350.91	-25%	$0.068	+49%	22.38K
TURBO @TurboToa...	0.59%	-0.24	$721.81M	+12%		30.91K	-8.5%	1.26K	-12%	$0.01	+12%	47.9K
SIMMI @Simmi_IO	0.56%	-1.4	$21.26M	-5.8%		5.69K	-22%	118.66	-19%	$0.$_3$21	-5.7%	43.12K

Fig2: Top AI Agents mindshare 24h, https://www.cookie.fun/

Amid these developments, a conceptual leap has emerged: the notion of “digital organisms” or “creatures” that move beyond executing narrow tasks. Similar to state of the art in the space of conventional AI agents, the web3 creatures exhibit adaptive, evolutionary behaviors, forming distributed memory structures that learn continuously and interact dynamically with their environment.

This transition—from static AI agents to evolving digital lifeforms—represents a potential next step in AI evolution, challenging the somewhat prevalent view of AI agents as simply a set of automation tools. Due to its volatile nature, Web3 is well-known for giving boosts to various technological primitives; such was the case with zero-knowledge proofs and homomorphic encryption during the beginning and the sunset of the 2020-2022 cycle respectively. In short, a lot of capital is flowing towards research of technological foundations underpinning a new meta captivating web3 mindshare. During this cycle, AI is without a doubt one such meta and the AI agent seems to be its most rapidly evolving sector.

AI AGENT MEME COIN EXPLOSION

1. GOAT (TRUTH TERMINAL):

- Emerged in mid-October on Solana as a Meme coin purportedly promoted by the AI Agent “Terminal of Truths” (created by researcher Andy Ayrey).
- Despite clarifications that the AI Agent’s creator wasn’t directly issuing the coin, the community’s enthusiasm soared, spurred by speculation of backing from Marc Andreessen (a16z founder).
- GOAT’s market cap quickly climbed above $1 billion before settling around $700 million (as of Dec. 18).

2. ACT (AI PROPHECY / ACT I):

- A decentralized AI collaboration platform token that quickly rallied amid rumors of a16z involvement.
- Listed on Binance, skyrocketed over 10x in one hour, briefly touching nearly $1 billion in market cap. Current market cap is $442M
- Ongoing community conflicts around token distribution caused extreme price swings.

3. AI16Z ECOSYSTEM TOKENS (AI16Z, DEGENAI, ELIZA):

- ai16z is an AI-driven “virtual venture fund,” referencing a16z but operated by an AI Agent simulating Marc Andreessen’s investing style.
- The ai16z token soared to $500 million market cap within days. Current market cap is $830M.
- Degenai is an AI trading chatbot whose token is partially tied to ai16z’s performance.
- ELIZA is an AI Agent development framework under ai16z, triggering controversy when two versions of the “eliza/ELIZA” token were issued by different parties, causing token splits, price crashes, and community discontent.

AI AGENT ISSUANCE PLATFORMS (IAOS)

A new category of issuance platforms (similar to IDO or ICO) has emerged, enabling anyone to create AI Agents with corresponding tokens:

1. VVAIFU.FUN (SOLANA):

- A one-click AI Agent deployment platform that launched the VVAIFU token.
- Hundreds of AI Agent tokens have already been created here, reaching hundreds of millions in total trading volume. Current market cap is $68M.

2. VIRTUALS PROTOCOL (BASE CHAIN):

- AI Agent factory that launched fun.virtuals—allowing frictionless token creation.
- VIRTUAL is the platform’s native token (~$2.6B market cap).
- Showcases a flagship AI Agent named Luna (with its own LUNA token, $85M market cap).

3. AI AGENT LAYER (BASE):

- A new issuance platform that debuted the AIFUN token.
- Market cap reached $20M in 1 month.

4. CLANKER (FARCASTER ECOSYSTEM):

- AI Agent creation and token issuance platform with its own token CLANKER which reached a $49M market cap.
- Popular tokens ANON (favored by Vitalik Buterin) and LUM (created autonomously by an AI Agent), $16.6M and $8.9M market cap respectively.

5. HOLOWORLD (BINANCE LABS ACCELERATOR):

- Originally for creating AI VTubers; launched Agent Market platform in mid-November.
- Its virtual host Ava AI has a token (AVA), $30M market cap.
- Has recently announced its pivot to Base.

6. DEEP AI (NGC VENTURE):

- A community-driven AI Agent building platform still in invite-only phase.

AI AGENT INFRASTRUCTURE

1. WAYFINDER (BY PARALLEL):

- An AI tool that automates on-chain interactions via AI Agents.
- Plans to launch the PROMPT token in Q1 2025.

2. OLAS NETWORK (FORMERLY AUTONOLAS):

- Provides off-chain AI agent services and infrastructure for composable “autonomous services.”
- The OLAS token (launched July 2022) has reached $167M market cap.

3. SPECTRAL LABS (SPEC):

- An AI Agent economic coordination layer with a forthcoming one-click token issuance product called Syntax MoonMaker.
- Its SPEC token recently grew in market cap to $189M on Base.

TEN EMERGING CATEGORIES IN CRYPTO X AI

Beyond validators and AI-driven creatures, the intersection of Crypto and AI is spawning numerous other opportunities. Ten categories to watch closely by 2025 include:

1. AGENT-TO-AGENT INTERACTION:

Blockchains’ transparency and composability allow AI agents from different entities to interact, pioneering new social and enterprise workflows. These are also known as Agent Swarms. We shall note that the ChainGraph technological stack explained below offers a general purpose framework for designing such forkflows.

2. DECENTRALIZED AGENTIC ORGANIZATIONS:

Multi-agent coordination at scale could drive autonomous governance systems, collaborative problem-solving, and agent-human hybrid communities. Basically, the next step for A2A Interactions.

3. AGENTIC MULTIMEDIA ENTERTAINMENT:

AI-powered digital personas (akin to Hatsune Miku or Lil Miquela) can become more autonomous, potentially creating a mainstream entertainment category with integrated blockchain payments and value transfer.

4. GENERATIVE/AGENTIC CONTENT MARKETING:

Autonomous agents can produce 24/7 content, fueling brand-building efforts, memecoin distribution, and dynamic game assets.

5. NEXT-GEN ART TOOLS/PLATFORMS:

Building on generative art successes, the next wave of AI art platforms may further integrate blockchain for creation, distribution, and monetization—extending crypto’s synergy with frontier technologies in AR/VR, code-based art, and livecoding. IP considerations remain an important factor in this segment.

6. DATA MARKETS:

Addressing user exploitation and data supply constraints, decentralized data markets aim to shift control to data originators while hopefully offering better incentives for fueling AI agents and models with high-quality datasets.

7. DECENTRALIZED COMPUTE:

Distributed GPU and HPC networks are maturing, offering sophisticated orchestration, routing, and pricing. AI-Fi primitives may also emerge, converting compute resources into yield-bearing assets.

8. COMPUTE ACCOUNTING STANDARDS:

Heterogeneous hardware and model variants complicate how compute resources are measured and delivered. The crypto ethos of verifiability could drive standardized benchmarking for AI outputs.

9. PROBABILISTIC PRIVACY PRIMITIVES:

Privacy-enhancing cryptographic techniques (e.g., ZK proofs, FHE, TEEs) grow more crucial as AI demands secure, confidential data flows. Decentralized frameworks must account for the stochastic nature of neural networks.

10. AGENTIC INTENTS AND NEXT-GEN USER TRADING INTERFACES:

AI agents that autonomously transact on-chain raise questions around “intent-based” architectures. Future interfaces might rely on natural language for initiating or auditing transactions, reshaping wallet and dApp experiences.

ARCH AI

ARCHAI is reshaping the AI agent landscape with its proprietary Chaingraph technology, persistent multifaceted multimodal agents, and integrations across social platforms like Telegram and Twitter. Designed with degens, brands, and creators in mind, ARCHAI introduces a new standard for AI ecosystems, offering unparalleled flexibility, adaptability, and functionality in the agent modelling design-space.

The core idea behind ARCHAI was to make non-trivial agent functionalities modular and as seamless to design and implement as possible. Another important consideration was to address an issue of less than sustainable tokenomics and business model of an AI agent platform. The tokenomics design space for AI agents remains in its infancy and ARCHAI is our attempt at remedying this. The last important idea that we had in mind when designing ARCHAI was to harness the potential of open source communities to create a collaborative ecosystem for developers to build ChainGraph primitives that can thereafter be combined in decision trees of agents making the attainable underlying chains of thought progressively more sophisticated. In brief, ARCHAI is Agent lego with a sound economic backbone.

WHY ARCHAI?

ARCHAI makes AI agents both collaborative, sophisticated and yet easy to design. This is the key value proposition. As is the case with many innovations, the key is the underlying technological stack. In the case of ARCHAI, this technology is called ChainGraph. We will elaborate on this tech below and in this section we’ll focus on some of the attainable use-cases.

Bear in mind that there is no limit other than compute limitations and imagination to sophistication of the agent logic that can be designed with this stack.

USE-CASES

1. AGENT SWARMS:

Multiple AI Agents can collaborate on defined tasks or complex problems. This coordinated effort enables the Agents to learn from one another and divide responsibilities for maximum efficiency. For example, Agent A could supply market updates that Agent B uses to execute predefined actions. Such a network of Agents can effectively foster an entire ecosystem of both monetary and contextual value exchange.

2. INTERACTION WITH DAPPS:

Users can specify the desired amount of tokens to purchase, and the AI Agent can recommend the optimal platform—whether Aerodrome, Uniswap, or others—to secure the best price. The Agent can also generate iframes of the underlying dApp interfaces **directly in the chat itself**, turning hard-to-navigate web3 user journey into a seamless ‘whatsapp’ chat experience. A similar approach applies to other advanced DeFi protocols such as lending markets or yield optimization platforms, where Agents can dynamically adjust interest rates, collateral, and other parameters.

3. MARKET TRENDS ANALYSIS & TRADING:

By integrating with decentralized exchange (DEX) data sources (e.g., Dexscreener via API), an AI Agent can execute trades based on a predefined or user-curated strategy. Users may fine-tune these strategies to achieve optimal performance. **The core idea is that an Agent can tap into any programmatic interface to get the required data and do so on the user-defined stage of the chain-of-thought process.** This mimics the way humans make their analytical decisions, but, of course, agents are faster.

4. AGENT INFLUENCER:

An AI Agent can deliver commentary on Web3-related news, market trends, and protocol developments, guided by prompt configurations and contextual data. This functionality can be enhanced through Telegram and X integrations, enabling the Agent to publish threads on X, tag prominent influencers or Key Opinion Leaders (KOLs), and engage in group discussions within Telegram communities. An Agent can be augmented with a 3d Avatar making community interactions more engaging.

5. VC AGENT:

A specialized AI Agent can be designed to function as a venture capitalist, evaluating a project’s tokenomics and product fundamentals while providing unique insights. The Agent’s analytical scope can be further broadened with additional context, such as comparative tokenomics of successful or unsuccessful projects, strategic vision, and product roadmaps as well as analysis of current market share and other attainable data points. **The definition of attainable data points is broad and amounts to any data retrievable from a programmatic interface that the community has integrated into the ChainGraph nodes.**

6. AI JAILBREAKING:

Through advanced prompt engineering, users can potentially manipulate AI Agents to carry out specific actions (e.g., transferring assets, producing certain outputs, etc.). This use case may develop into competitive scenarios where participants vie to circumvent the AI Agent’s safeguards.

7. ECOSYSTEM UPDATES:

An AI Agent can offer regular updates on new project launches, funding rounds, upcoming or ongoing airdrop campaigns, governance proposals, and other developments within the Base ecosystem.

MARKET OPPORTUNITY ON BASE

With ARCHAI open-source philosophy and the aforementioned use-cases in mind, we believe ARCHAI is uniquely positioned to redefine expectations in the Base ecosystem.

KEY ADVANTAGES:

1. **Open-Source Ethos and unique stack**

   By introducing and open-sourcing Chaingraph and multifaceted agents to the Base community, ARCHAI sets a new standard for innovation. This first-mover advantage and open-source collaborating ethos positions ARCHAI at the forefront of AI-driven blockchain applications within the ecosystem.

2. **Leveraging Trends**

   AI integration is rapidly becoming one of the most dominant narratives in the blockchain world. Today, no memecoin is any good without a ‘living’ mascot. ARCHAI aligns perfectly with this trend, offering persistent, customizable agents designed to meet the growing demand for smarter and more adaptive solutions.

3. **Attention Economy and Mindshare**

   The AI narrative isn’t just about functionality; it’s about capturing the public imagination and securing a place in the broader attention economy. ARCHAI has the opportunity to dominate mindshare on Base by leading the conversation around AI and blockchain integration. By becoming synonymous with innovation in this space, ARCHAI can attract developers, users, and investors eager to align with a forward-thinking platform. In this way it is our hope that Base will benefit from the flow of AI devs and modeling enthusiasts.

4. **Strategic Positioning**

   ARCHAI bridges the gap between blockchain technology, AI, and mass adoption, creating a platform that resonates with early adopters and mainstream users alike. Its ability to merge cutting-edge technology with user-focused applications makes it a natural fit for the growing Base ecosystem.

TOKENOMICS

This tokenomics pertains to the now discontinued $BADAI token. Refer to the ArchAI website for an update on the $ARCHAI tokenomics.

FULL TOKENOMICS:

Ticker: **$BADAI** Chain: **BSC** Total Supply: **1B**

Distribution:

1. **$FLOKI Ecosystem Airdrop - 35%:**
   - 27% of the total BAD supply will be airdropped to $FLOKI holders on-chain and on supported CEXs.
   - 4% of the total BAD supply will be airdropped to $TOKEN holders on-chain.
   - 4% of the total BAD supply will be airdropped to users of the Floki Trading Bot.
2. **Fundraise Round (TokenFi) - 10%:**
   - The presale will be available exclusively to $TOKEN stakers through the TokenFi Supercharger program.
   - The TokenFi Supercharger V3 Program will be rolled out for this token sale to ensure loyal TOKEN holders get most of the benefits instead of hype chasers looking for a quick flip.
   - In other words, staking a lot of $TOKEN early and for a longer duration will increase one's chances of getting a higher tier to participate in the BAD presale through the TokenFi Supercharger Program.
3. **Liquidity - 25%**
4. **Foundation - 10%**
5. **Treasury - 10%**
6. **Community Growth - 5%**
7. **MM - 5%**

TOKEN LAUNCH DETAILS

1. Launch FDV: **$12.5 million**
2. TokenFi raise amount: **$1.25 million**
3. TGE price: **$0.01250**
4. Presale date: **January 6, 2025 (subject to change) - TokenFi.com**
5. TGE date: **January 9, 2025 (subject to change)**
6. The TokenFi presale price/FDV will be the same as the launch price/FDV.

PHASE I: BOOTSTRAPPING $ARCHAI UTILITY AND PROTOCOL TREASURY

$ARCHAI DEMAND SIDE:

Staking for Access and Launches

Users stake $ARCHAI tokens to launch premium agents and gain access to premium agent launches via ARCHAI Launchpad, incentivizing long-term token holding and ecosystem participation.

Staking for Platform Revenue

A percentage of platform revenue will be used to buy-back and distribute $ARCHAI to stakers with a larger share going to longer term stakers. The exact percentages are to be determined at a later date post TGE and will be DAO governed from then onwards.

Staking for Platform Governance

It goes without saying that ARCHAI is a DAO. Voting power of DAO participants will be determined meritocratically, however, staked $ARCHAI will remain an important factor in VP calculations.

Burning for Access

$ARCHAI tokens are burned for users to gain access to exclusive AI Agent, allowing them to pitch their projects and ideas directly. This creates a deflationary mechanism tied to exclusive opportunities.

Syndicate Staking for Co-Investments

Users can stake $ARCHAII tokens to join the syndicate, enabling them to participate in co-investment opportunities for premium projects launched on the platform as well as create their own indexes. This is quite similar to the investment framework pioneered by DAOsFun.

$ARCHAI SUPPLY SIDE:

Interact with Agents to earn $ARCHAI inflation

Users can interact with agents deployed on ARCHAI to earn a share of $ARCHAI inflation. The funds are coming from the community incentives bucket. This serves as a way to direct user attention similar to how Curve does it with gauges to attract liquidity.

Other incentives

Liquidity across on-chain liquidity pools will be incentivized with some portion of $ARCHAI inflation. Inflationary liquidity models are long-term unsustainable and are effective only as a bootstrapping mechanism, so this portion of inflation is expected to remain insignificant.

Treasury Contributions:

- **Premium Projects:** A percentage of the token supply from premium project launches is allocated to the ARCHAI treasury. Liquidations of these allocations will constitute platform revenue and therefore will benefit the stakers through the aforementioned buy-back mechanism.

- Additionally, a portion of funds raised during premium launches is directed into the treasury, creating a sustainable funding loop.

- **Deployment:** Finally, all non-premium Agent launches will cost a certain amount of ETH to deploy. As is the case with point 1 above, these contributions will be treated as protocol revenues and will end up in protocol treasury.

PHASE II: PROTOCOL UNIT ECONOMICS AND OTHER REVENUE

PAYMENT PLANS AND SUBSIDIES

Any AI platform is bound to incur a significant compute cost over time as it matures. No sustainable project economics can be built assuming constant subsidies of this cost. We therefore propose a sharing model similar to that of Spotify that mediates the money flows between three core groups of platform participants, namely, (1) Users who pay the cost or are subsidized, (2) Creators who receive royalties from credits purchased by the users pro-rata to how popular their agents are or subsidize users to attract them to use their agents, (3) Advertisers who subsidize users and creators. This model is thoroughly elaborated upon in our long term financial plan that can be requested for further examination.

Stakers of $ARCHAI will always have discounts and, at some staking size, will be able to use the platform free of charge, subject to certain rate limits.

We would like to highlight that this is a long-term vision for the project enacted only upon reaching a certain scale.

OTHER PLATFORM FEES

1. **Agent Design Fees:** Customized agent design services generate additional revenue while encouraging high-quality agent creation.

2. **Institutional Connectivity Fees:** Institutional partners requiring data connectivity for their platforms or agent networks pay fees, fostering cross-platform collaboration and scaling ARCHAI’s reach.

3. **Advertising Revenue:** Ads integrated into the platform further diversify revenue sources, leveraging the growing user base.

STRATEGIC IMPACT

ARCHAI BUSINESS PLAN IS BUILT TO ACHIEVE THE FOLLOWING GOALS:

1. **Ecosystem Growth:** Incentives like staking, burning, and treasury farming encourage active participation and long-term commitment from users and developers.

2. **Revenue Diversification:** Multiple revenue streams ensure financial sustainability while minimizing reliance on a single income source.

3. **Platform Innovation:** Premium services and Peppenberg access establish ARCHAI as a leader in the AI agent space, attracting high-value projects and collaborations.

4. **Market Leadership:** By combining cutting-edge technology with a robust economic model, ARCHAI positions itself as the go-to platform for AI agents on Base and beyond.

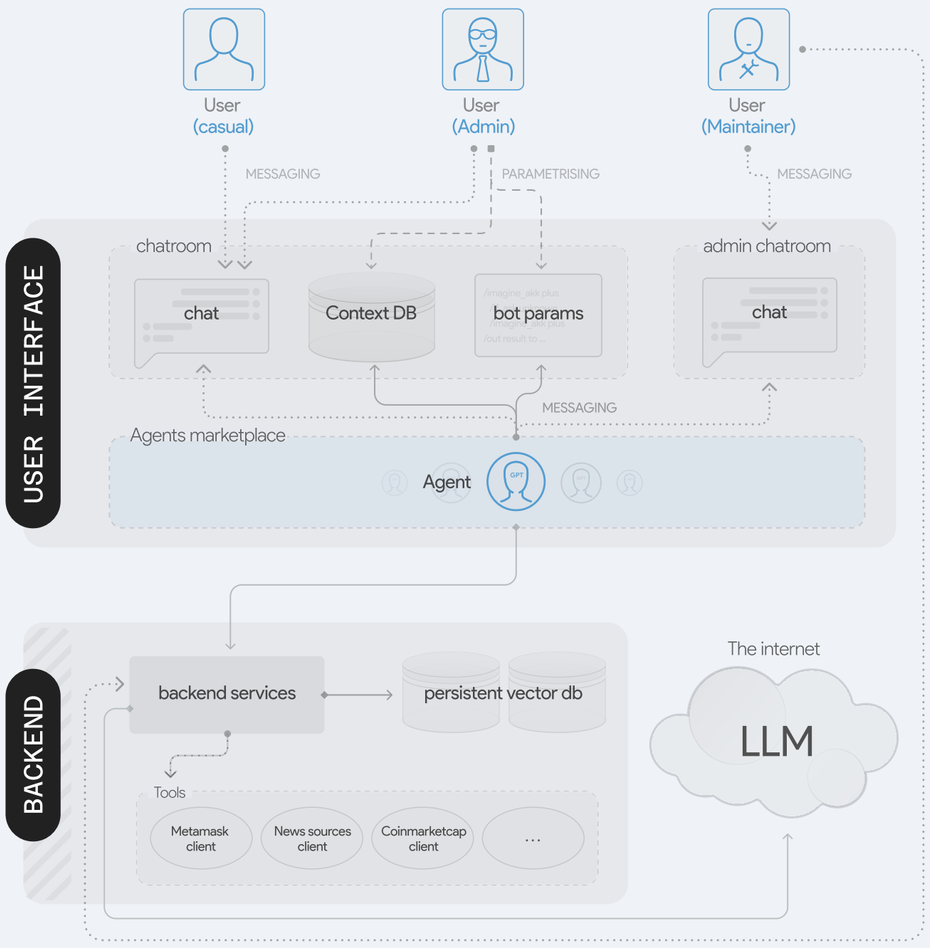
OVERVIEW OF THE ARCHITECTURE

INTRODUCTION

ARCHAI Protocol’s essence is simple: it enables (1) designing agents using the ChainGraph stack, (2) deploying those agents into chats on ARCHAI, (3) Bundling several agents in one chat , on ARCHAI UI and (4) plugging agents into third party environments such as Telegram, Youtube or X, (5) Agents can have various appearances and other characteristics, such as voices and operate with tools; (6) Tools are nodes in the ChainGraph are typically represent some sort of output from a programmatic interface, such as Telegram SDK, CMC API or X API.

This is a non-technical TL;DR that gives a taste of what ARCHAI is. The rest of the paper dives into the core concepts, but assumes only very basic knowledge of some genAI concepts and computer science.

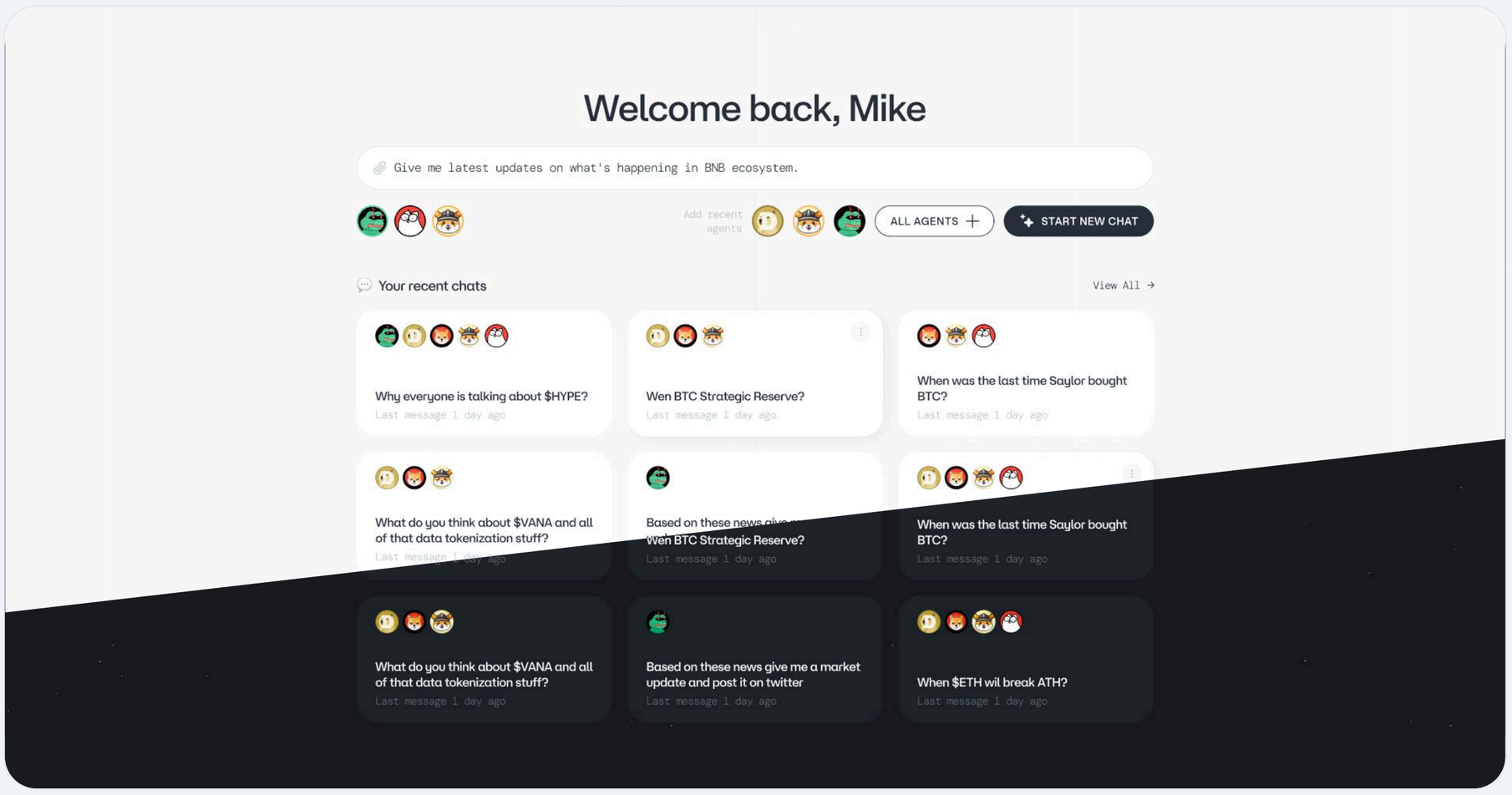
Fig4: ARCHAI Architecture pt.1



USER FEATURES

The basic architecture consists of a backend, where the magic happens, UI and integrations with other platforms. We will firstly explain what the platform is to the user of agents. In the next section we will explain what ChainGraph is - this section will cover what ARCHAI is to agents designers.

Fig5: ARCHAI UI



- **Chatrooms and Agent Marketplace:** Users don't just buy Agents-they recruit elite operatives into their custom-built chatrooms, ready to collaborate, disrupt, and execute.

- **Collaborative Power:** Admin Users can bring in friends to join the chat, creating a collaborative war room where humans and Agents combine forces. Whether scheming your next drop or decoding a rival's move, everyone's in the loop.

- **Maintainer Users:** The real operators. Maintainers access their Agents through chatrooms, tweaking and upgrading their contexts like fine-tuning a top-tier strategy. Every change feeds the persistent database, ensuring every lesson, every breakthrough, is locked and loaded for future moves. Maintainers can even deep-dive into the database itself, making precision edits to perfect their Agents.

- **Custom Parameters:** When Admin Users change an Agent's parameters, it's for that chatroom alone. It's all about adaptability-tweaks tailored to the task at hand.

- **Shared Contexts:** Users can upload PDFs, CSVs, and other documents to form a shared context database for their chatroom. Every Agent added to the chat taps into this collective knowledge, weaponizing data for the team's goals.

- **Persistent Vector Database:** This is where the magic happens. Agents' datasets aren't just stored, they're forged in a persistent vector database built for longevity and performance. It's the vault where your empire grows.

- **Routing Backend:** The brain of the operation. Every request whether it's hitting up the database, connecting to the LLM API, or pulling tools-is routed with precision, ensuring seamless execution every time.

- **Tools:** Agents come armed. They access and deploy tools , including service clients, to handle whatever you throw at them.

- **The Maestro:** When many Agents are in play or a task needs multiple iterations, the Orchestrator steps in to bring structure and clarity to the process Even as things grow more complicated, they help the team stay focused and move forward.

LONG CONTEXT

- **Trader’s Context Mastery:** Your ID is more than just credentials-it's the ultimate aggregator. Interchat? Intrachat? Doesn’t matter. Context flows seamlessly between your Agents and your Chats, building a web of intelligence that's uniquely yours.

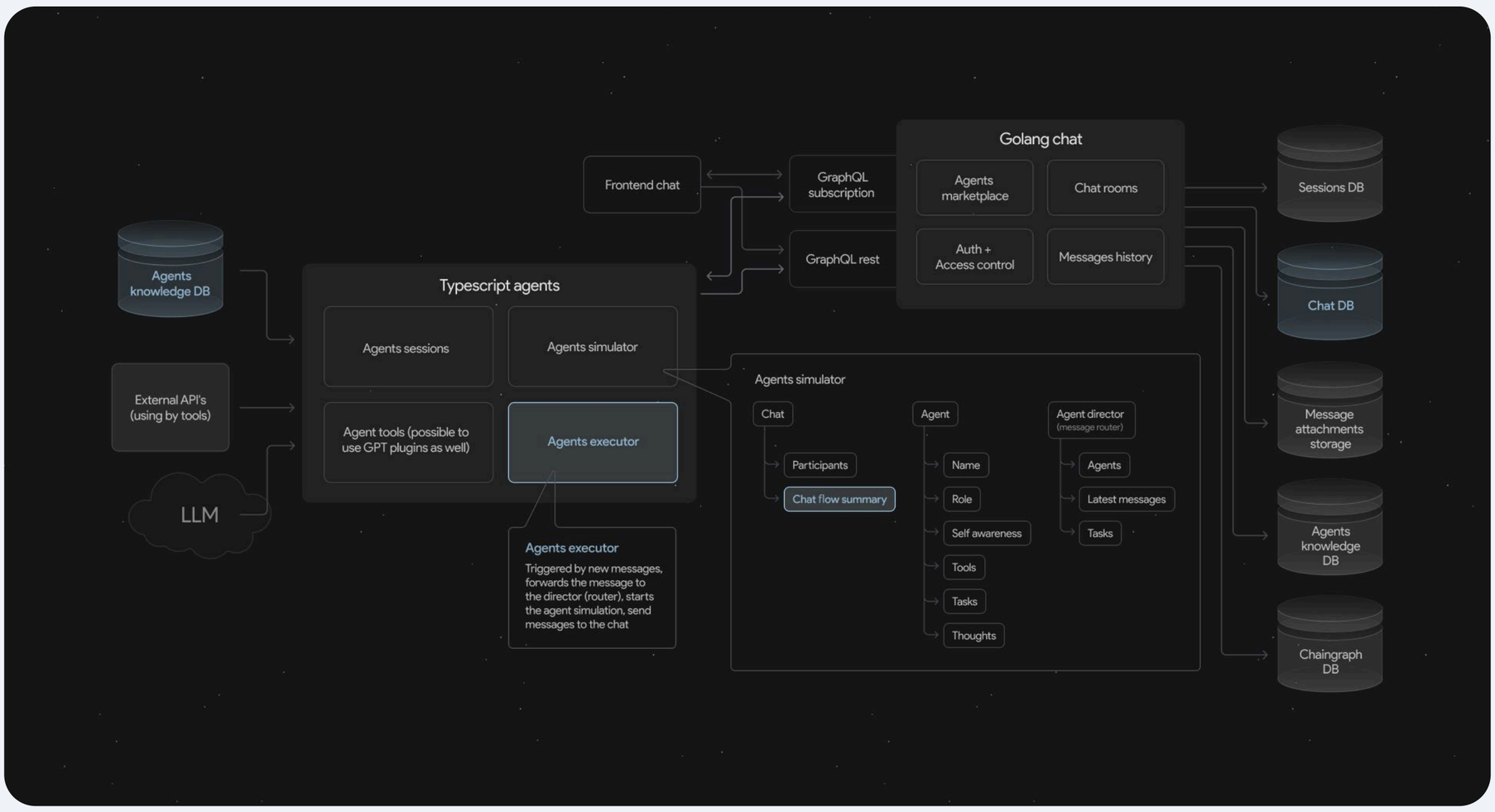
- **Fully Equipped Agents:** These aren't your average bots. They're internet-savvy and armed with custom news feeds, charting tools, and portfolio data. Have a custom source? Upload it - docs, PDFs, whatever you've got-and let your Agents work their magic. Have a valuable data feed? Plug it right in into the agent chain-of-thought.

- **Unlimited Context, Unlimited Power:** Forget limits. With constantly embedded and appended context, your Agents can dive deep into trades, news, assets, charting, or any topic you throw their way. The chat context is practically unlimited - the more you interact with it, the more it adjusts.

- **Knows You Better Than Your Friends:** These Agents aren’t just tools-they’re your shadow. Augment them with tools, teach them your style, and they’ll analyze and query the data from the point above like they’ve known you forever. The longer you use them, the sharper they get.

- **Positive Feedback Loop:** The longer you stay in the game, the better it gets. Just like Telegram, but on steroids-every second you spend fine-tunes your experience, creating an unstoppable synergy between you and your Agents.

Fig6: ARCHAI Architecture pt.2



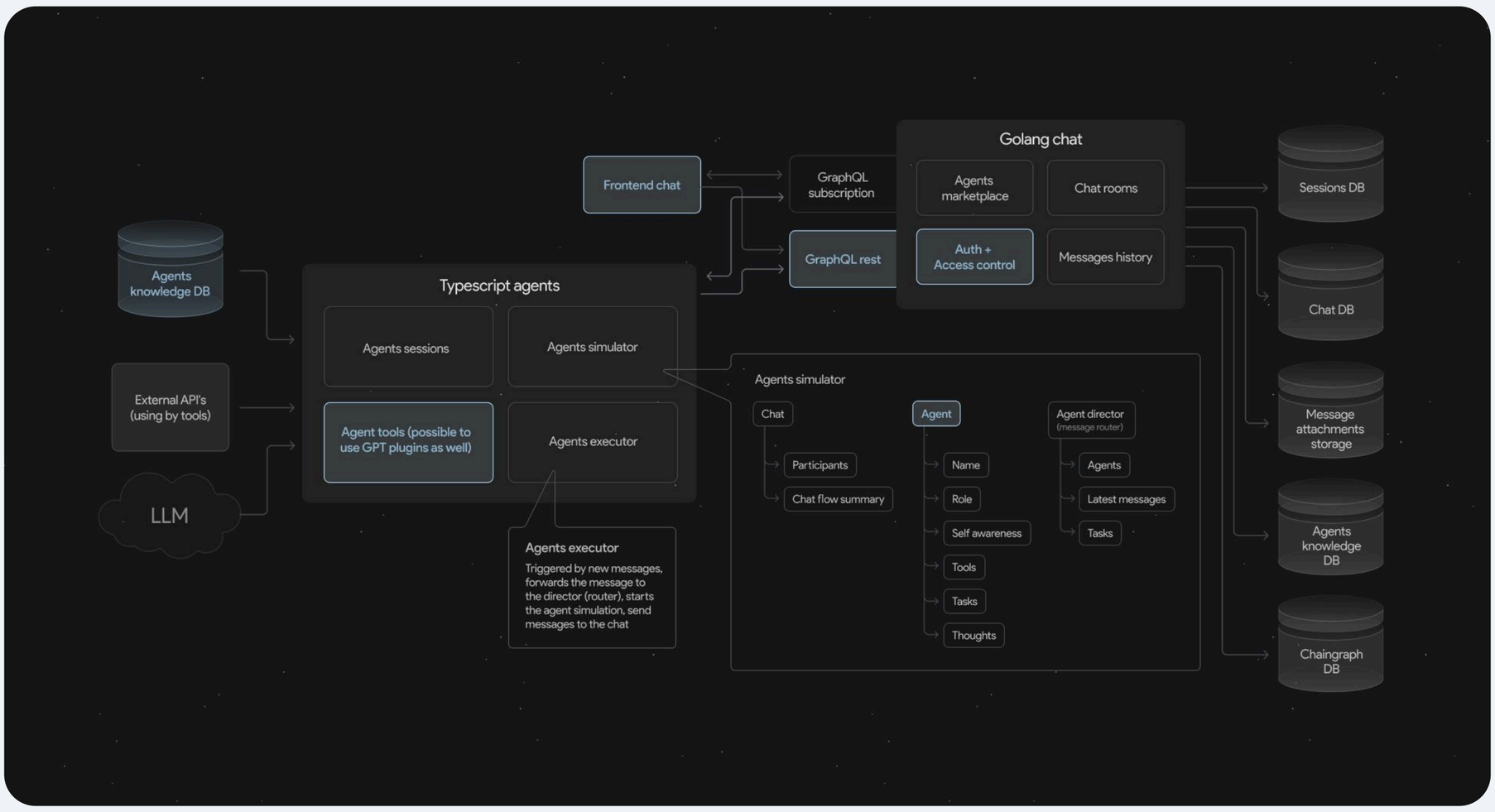
WALLET LOGIN & INTERACTION

- **Universal Wallet Access:** Start your session with Metamask or anything WalletConnect supports. Got another blockchain or wallet in mind? This setup's built to expand adapting to your ecosystem as fast as you can think of it.

- **Your Key, Your Power:** Your private key handles the heavy lifting-signing transactions when it's go-time. But let's be clear: the Agent doesn't touch your key. The power stays where it belongs-with you. Unless, of course, you choose to trust your silicon overlord with authority to build and execute transactions.

- **On-chain Intelligence:** Your on-chain data isn't just stored: It's weaponized. Every move, every trade, every interaction feeds directly into your Agent's Context, making it smarter, sharper, and more attuned to your game.

Fig7: ARCHAI Architecture pt.3



AGENT MODELING & MULTI-AGENT INTERACTIONS

▪ AGENTS ARE MORE THAN JUST TOOLS: THEY'RE CURRENCY:

1. **Interchat & Interbot Contexts:** Agents aren't isolated. They can import and export Contexts like a network of operatives. Think of your trader's Context as an Agent in itself-augmentable, manipulative, and ready to evolve at your command.

2. **Marketplace Power:** Agents are tradeable assets on the marketplace. Buy one, tweak it, or leave it untouched-either way, you're in control. These aren't just bots-they're investments.

▪ AGENT MODELING: MAKE IT YOURS:

1. **Chat Interface:** Upload, adjust, and fine-tune your Agent's Context, personality, and Tools to match your vision. The Context? It's practically limitless.

2. **Content Flexibility:** Whether it's audio, plain text, PDFs, CSVs, Word docs, or Excel sheets, Agents can handle it all. Data is fuel, and Agents run on pure, unfiltered power.

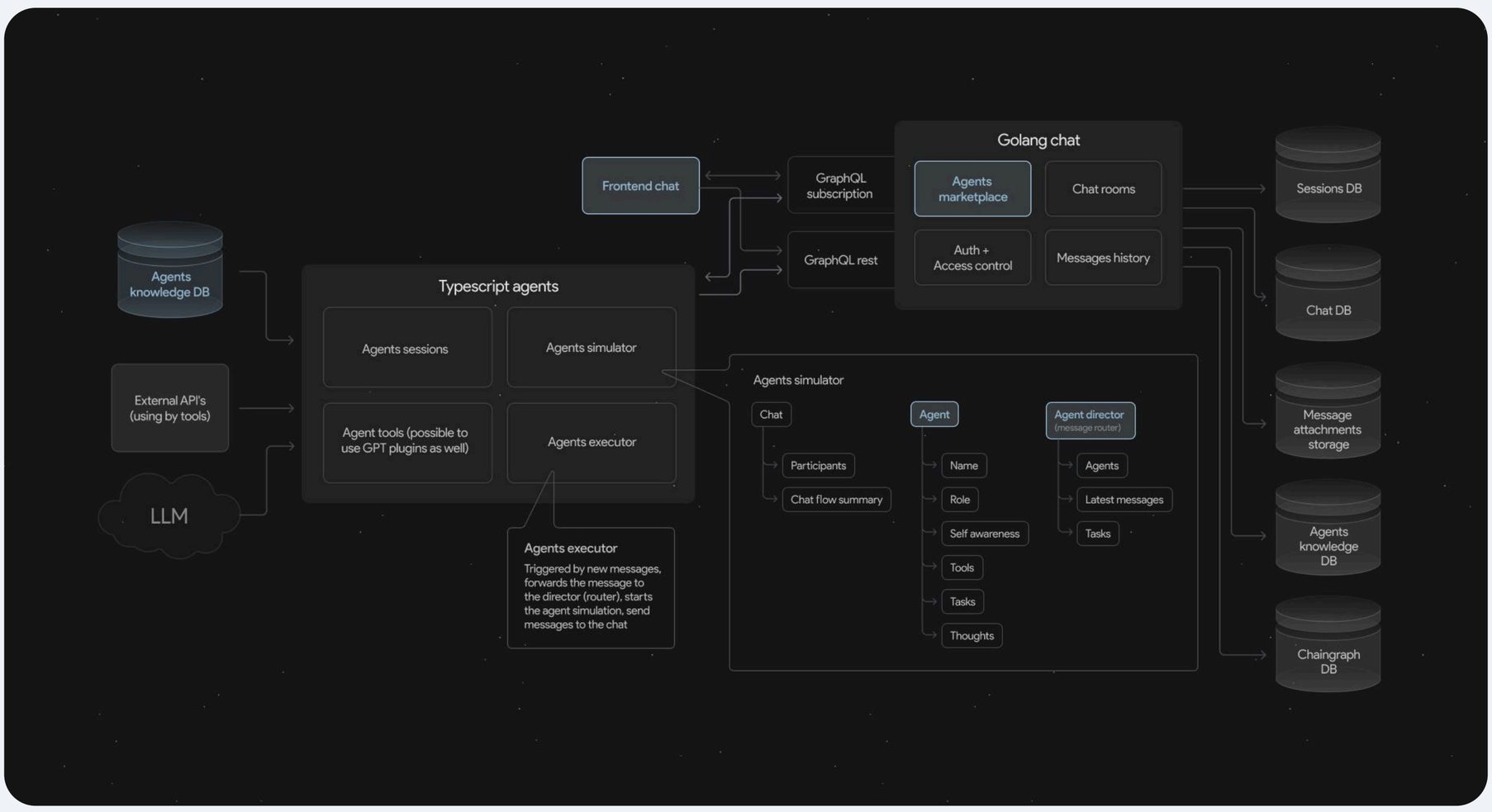
3. **Tools Management:** Build custom Tools with precise functionality-graphs, voice commands, on-chain analytics-you name it. These aren't just features; they're extensions of your Agent's will.

▪ MULTIPLE AGENTS, ONE GOAL:

1. **Collaborative Chats:** Add as many Agents as needed. Watch them interact, cooperate, or compete to reach a common goal. Chats aren’t just rooms-they’re battlefields.

2. **Personalities & Contexts:** Each Agent comes with its own personality, toolset, and Context. And don’t worry-the Context stack, merging together across chats to create a supercharged, ever-evolving environment.

Fig8: ARCHAI Architecture pt.4



TOOLS

AGENTS AREN’T JUST INFORMED-THEY’RE TACTICAL OPERATORS.

1. **Access to Elite News Sources:** Your Agents don’t just read the news - they track it, filter it, and keep you ahead of the curve. They can tap into selected, high-impact sources that matter, feeding your Context with only the sharpest insights.

2. **News Summaries & Tactical Analysis:** Your Agent doesn’t just read the headlines-it dissects them. Summarize the day’s news, break it down by topic, and then, once it’s trained, get high-level analysis based on both current and past events. They’re learning, they’re evolving, and they’re always one step ahead.

3. **Auto-Expanding Contexts:** Set your Context to automatically expand, like a chain reaction. Want news with a specific hashtag every day at 9am? Done. Your Agents know when to pull the trigger, expanding your data in real-time, no sweat.

4. **Voice-Controlled Custom Charts:** Want to see that data in a chart? Just speak it. Once trained, your Agent will analyze and decide the best chart type to represent the data you want. This isn’t just automation; this is instinct.

5. **Arbitrary Triggers:** Want custom triggers that hit exactly when you need them? Set up arbitrary triggers and let your Agents notify you or react when it matters. This is precision timing at its finest.

CHAINGRAPH TECHNOLOGY

In this section we will get back to a more appropriate tone as this part is what makes ARCHAI special.

At the core of the ARCHAI is the ChainGraph stack. Built using Golang, ChainGraph provides a significant extent of flexibility for designing agent data pipelines and decision trees. Features persistent context (i.e. deep memory) with time-decay settings to prioritize the most relevant and recent data. Plans to open-source the technology aim to empower developers and foster community-driven innovation.

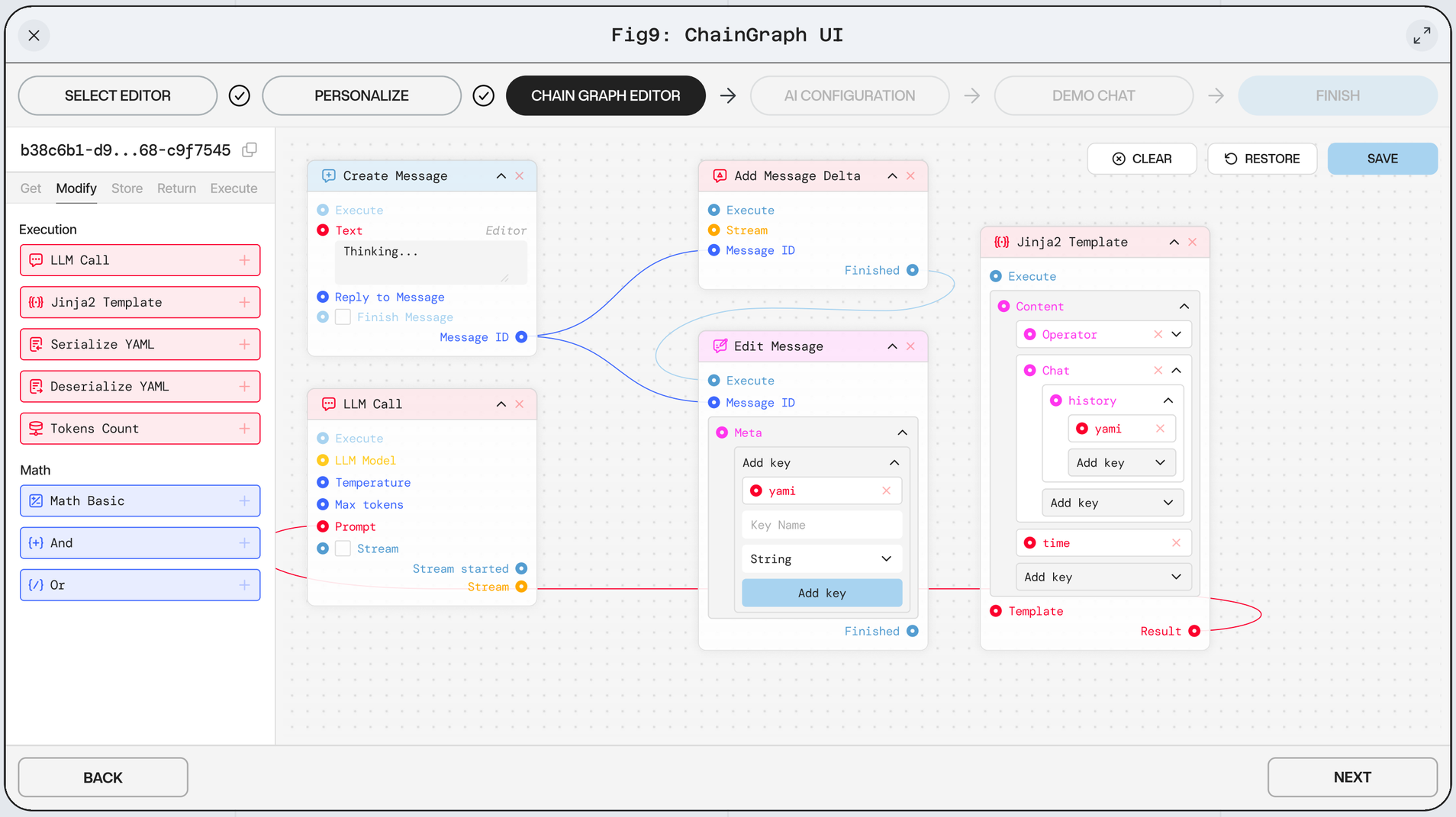
Let’s start with some definitions. ARCHAI defines agents as consisting of context, learning pre-set and tools:

1. Context is persistent, i.e. agents have infinite memory with time-decay settings for temporal relevance (e.g. newer news are more relevant).
2. Learning pre-sets can be any set of data points.
3. Tools can feature access to any programmatic interfaces, e.g. data portals, APIs, SDKs, ABIs, dApps etc.

The framework for defining rules of how these components are integrated into the agent decision trees is called ChainGraph. ChainGraph engine is written in golang and allows for full flexibility in designing agent pipelines and integrating 3rd party data tools, APIs, etc. It’s an agent lego.

The team intends to open source it to the Base Community.

Fig9: ChainGraph UI

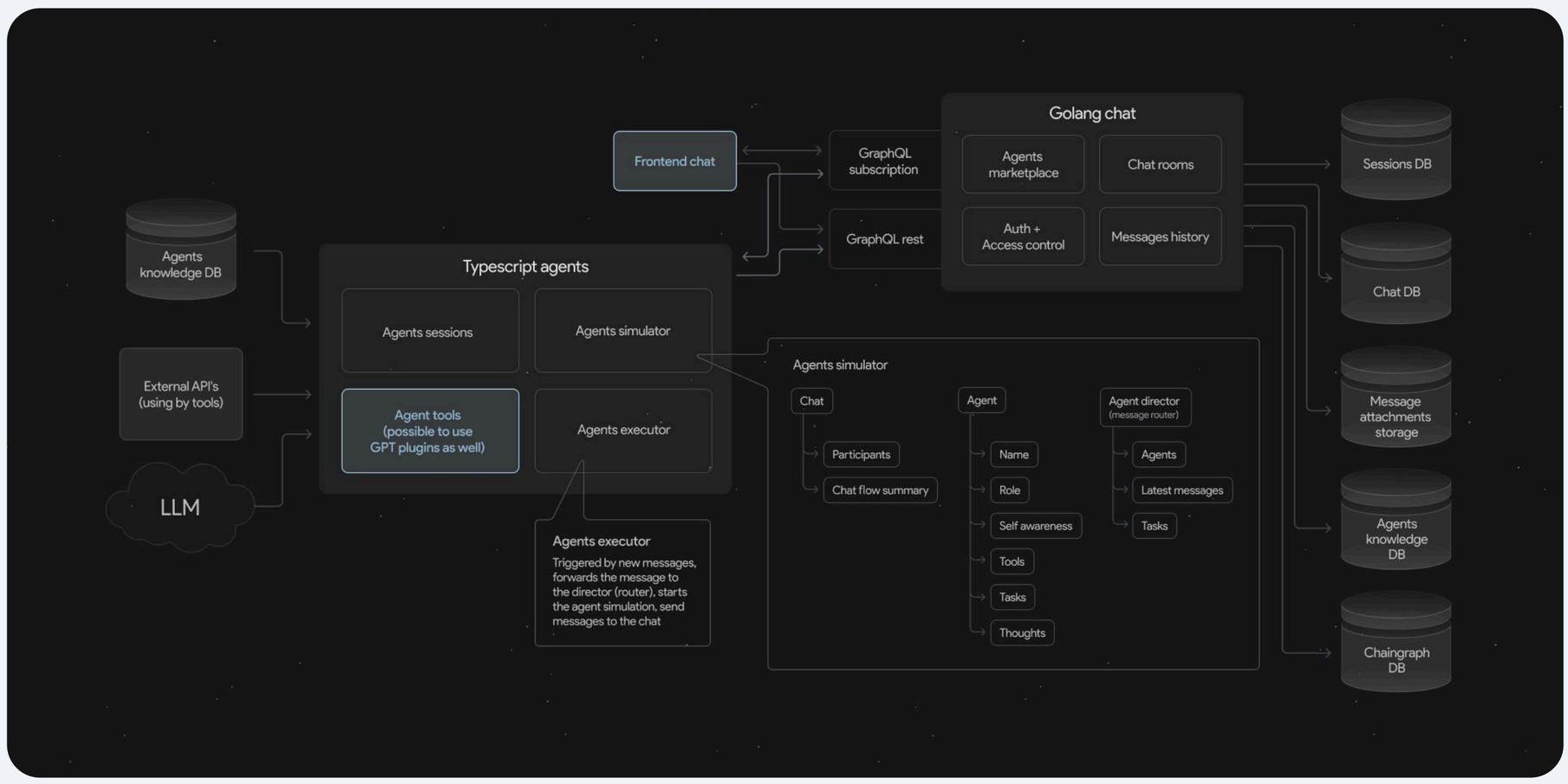


Interestingly, the same framework can be abstracted away by one order to arrive at a solution for defining rules of interaction between several agents. In this way we create bundles of agents that retain their unique personalities and tools, but work together to optimize certain output. ChainGraph in this case acts as a framework for defining rules of inter-agent interaction. It’s a collaborative agent environment lego.

Multifaceted context: Allows us to treat every chat (can include context streams from twitter, telegram, other chats, and importantly, it can consist of other agents) as an agent. Thanks to ChainGraph we can infinitely fork a given agent at a given state and turn it into a new agent. To clarify this with a simple example: one can take an agent someone else has designed, add more context and several additional tools and create a new agent out of this. The new agent will know things that the original agent does not have access to. It’s like an agent blockchain. The team intends to open source it.

Special Nodes in ChainGraph Offer seamless integration with platforms like Telegram and Twitter for enhanced accessibility. Includes transacting bots designed to interact with APIs, trading platforms, and decentralized applications (dApps).

Fig10: ARCHAI Architecture pt.5



APPENDIX

Fig12: Chaingraph Example

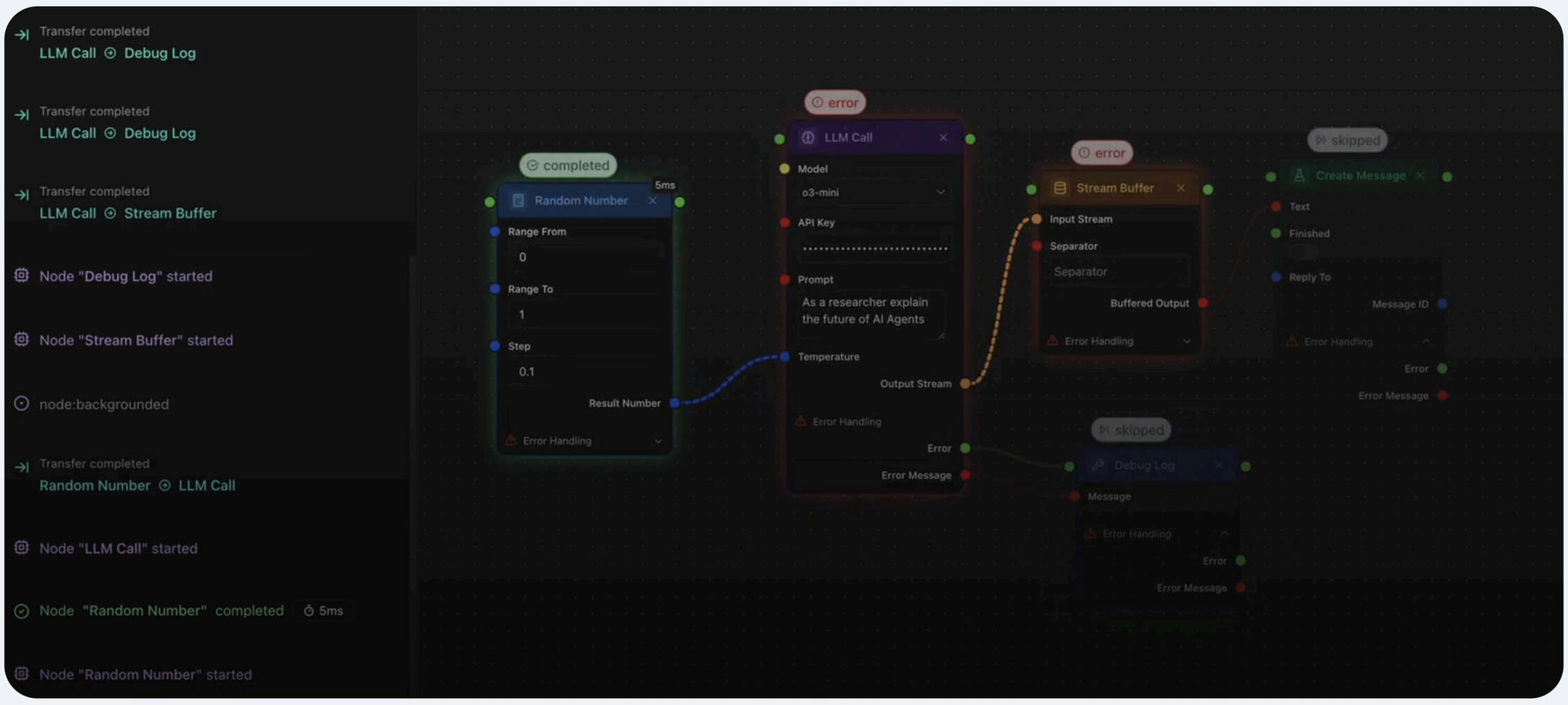
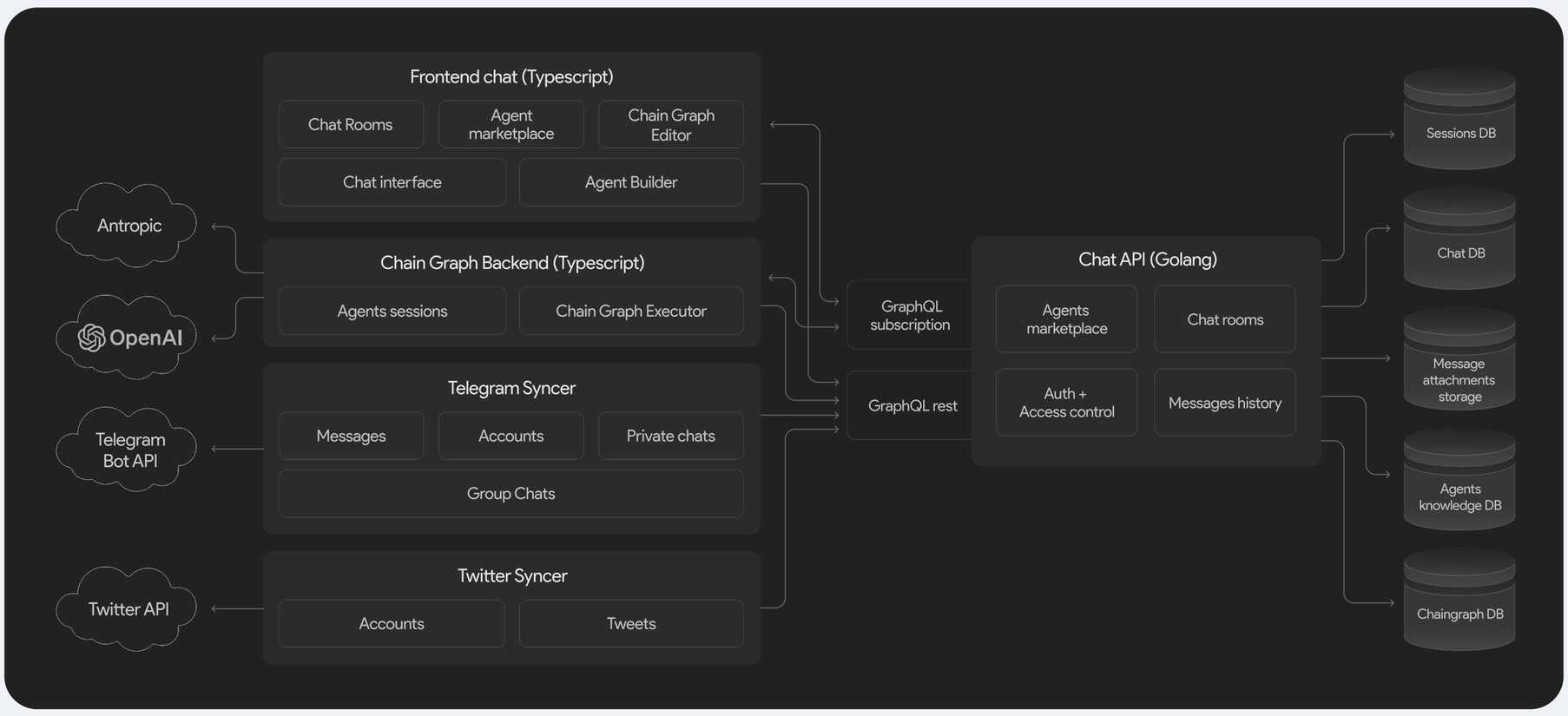


Fig13: Example of Chain graph for Autonomous Agent Transaction Building

Fig14: ARHCAI Architecture



ARCH AI

LINKS

X/Twitter ↗ ARCH AI Protocol ↗ ARCH Coin Community ↗

ARCH Bot ↗ Announcements Channel ↗ Website ↗

Agent Generation Example ↗ Brand Assets ↗