VENKATESH RAJENDRAN
Tech Lead & Blockchain Engineer

Email: rvenki666@gmail.com
Phone: +91 8610203344
Website: www.venkateshweb3.com

PROFILE SUMMARY:

Tech Lead and Blockchain Engineer with **5 years** of experience developing **decentralized cross-chain protocols, smart contracts, backend, and p2p infrastructures**, enabling web3 for over **150,000 users**. Proven expertise in building robust infrastructures for GameFi and DeFi, **prioritizing security and scalability**. Adept at leading cross-functional teams to deliver innovative Web3 solutions across diverse domains, including **GameFi**, **DeFi, NFTs, Account Abstraction, AI Agents, SocialFi, and ZK**.

SKILLS:

Blockchain: Solidity, Rust, Yul Assembly, Circom, Zero-Knowledge Proofs, ZKTLS, Foundry, Hardhat, Anchor, EVM, SVM, Static analysis, Fuzzing, Invariant Testing, Gas Optimizations, and Security audits.

AI: LangChain, LangGraph, ElizaOS, SmolAgents, Coinbase Agentkit, HuggingFace, AI Agents, RAG, AI Embeddings, Chroma, and Qdrant vector stores.

Frontend & Backend: Javascript, Typescript, Rust, Nest.js, Node.js, Express.js, Axum, Tokio, Libp2p, TEE, Websockets, Redis, GraphQL, MongoDB, PostgreSQL, AWS, Next.js, React.js, Ethers.js.

Specialization: Account Abstraction, Smart wallets, GameFi, DeFi, NFTs, ZK Proofs, Chain Interoperability, DAO, Web3 Social, P2P Distributed Systems and AI Agents.

WORK EXPERIENCES:

OP GAMES | TECH LEAD - FULL STACK WEB3 DEVELOPER   April 2022 - Present

- Developing a **decentralized AI coordination protocol** using **Libp2p** to empower AI agents to autonomously collaborate and execute **AI agent intents** for both on-chain and off-chain requests.
- Creating a **Living Game Engine** paired with an **Agentic game developer** to design self-evolving games and adapt existing ones, tailored to the economics and interests of the gaming ecosystem.
- Led the cross-functional team in developing a **multichain decentralized tournament protocol**, empowering indie game developers to create **100+ Web3 games** using our robust infrastructure.
- Architected **off-chain infrastructure** to efficiently manage **single-player and multiplayer** tournament gameplay, resulting in a **30%** performance improvement in concurrent gameplay.
- Designed blockchain **data indexers** to index on-chain events for tournaments and games, enhancing the gameplay experience for over **10,000+** users.
- Directed in-house **security audits and gas optimization** for smart contracts, achieving a **50%** reduction in gas consumption and a **23%** decrease in bugs and vulnerabilities before external audits.
- Developed **Web3 tokenization** models and implemented an **omnichain ERC20 token** contract compatible with **20+ EVM chains**, featuring Staking Rewards, Vesting, Token Locks, Airdrops, and Governance through the **LayerZero** stack.

- Led the creation of a customizable and equippable **Avatar NFT** smart contract with a supply of **6666 NFTs** and built an in-game avatar builder, allowing users to equip from **35,000 unique NFT** variants.
- Architected autonomous systems leveraging **Chainlink and Account Abstraction** to automate on-chain and backend game mechanics, including gas and nonce management with **paymasters and user operations** resulting in **38% improved worker concurrency** and fault tolerance.
- Collaborated with guild community teams to establish **Game Jams** and successfully onboarded over **80+ games** with integrated Web3 and crypto features.

M0 VENTURES | TECH ADVISOR & LEAD - BLOCKCHAIN   December 2022 - Present

- Establishing a **decentralized, user-owned DataHub** or DataDao within the Vana Ecosystem, allowing users to contribute data securely via **ZKTLS** and sell it to data-driven applications and AI training, all while ensuring **privacy and full control**.
- Led the cross-functional teams in developing various **cross-chain DeFi protocols**, enabling market makers to provide **unified liquidity across 5+ blockchains**, including **BTC and EVM** chains. Currently, this product supports over **1,000 cross-chain swaps** in the testnet environment.
- Guided development teams across multiple domains, including **smart contracts, backend, and frontend** development, to create innovative Web3 applications such as a Web3 GameFi marketplace and Web3 social platforms.

SPRINGWORKS | BLOCKCHAIN DEVELOPER   November 2020 - April 2022

- Collaborated with the development team in creating **decentralized on-chain identities** for over **150,000 users**, enabling them to transparently showcase their Web3 experience to companies and communities.
- Architected a suite of **microservices-based backend systems** to efficiently deliver diverse onsite services to **100,000 users**, ensuring scalability and reliability.

EDUCATION

Bachelor of Engineering - Computer Science

Anna University, 2017 - 2021