

LUAY ASSALLAMI

Blockchain Engineer | EVM, Solidity & TypeScript | Digital Assets & Settlement

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PROFESSIONAL SUMMARY

Blockchain engineer focused on EVM-based digital asset and financial infrastructure. Experience designing and implementing Solidity systems involving tokenized assets, permissions, settlement workflows, signature-based authorization, escrow, and programmable transaction flows. Strongest in smart-contract and system architecture, with hands-on development using Solidity, TypeScript, Node.js, Hardhat, ethers.js, and OpenZeppelin.

TECHNICAL SKILLS

Blockchain: Solidity, Ethereum/EVM, OpenZeppelin, Hardhat, ethers.js, ERC-20, ERC-721, EIP-2612, EIP-712, EIP-1271

Backend / Integration: TypeScript, Node.js, Express.js, REST APIs, transaction processing, event monitoring

Engineering: Smart-contract architecture, tokenization, settlement workflows, access control, automated testing, Git, Linux, React

EXPERIENCE

AAK Tele-Science, Inc. | *Blockchain Engineer - Project-Based*

Aug 2024 - Present

- Designed and developed EVM-based digital asset infrastructure involving tokenized ownership, escrow, settlement, auctions, and programmable transaction workflows.
- Built AERO, a custom ERC-20 using Solidity, OpenZeppelin, Hardhat, and TypeScript with role-based access control, pausable functionality, EIP-2612 Permit, and EIP-712 typed-data authorization.
- Implemented EIP-1271 smart-contract signature verification, reentrancy protection, multi-stage fund-release logic, validation rules, and event-driven state tracking.
- Developed Node.js/Express.js services and React integrations with ethers.js for contract interactions, transaction processing, event monitoring, and application synchronization.
- Built Hardhat/TypeScript deployment and automated test workflows covering permissions, signatures, state transitions, edge cases, expected failures, and multi-EVM deployments.

Confidential Sports Technology Startup | *Blockchain Protocol Engineer - Contract*

2025

- Contributed to early-stage EVM protocol design under NDA, translating product requirements into smart-contract components, participant roles, permissions, transaction flows, and protocol state transitions.
- Evaluated token mechanics, contract relationships, authorization models, and on-chain/off-chain system boundaries for a sports technology platform.

AAK Tele-Science, Inc. | *Blockchain Developer - Project-Based*

2022

- Contributed to early EVM smart-contract development and token-based application workflows, building foundational experience in Solidity and blockchain system design.

SELECTED PROJECT

Institutional Tokenization Platform | *Solidity / EVM /*

2026 - Present

Hardhat / TypeScript

- Building a modular EVM platform for permissioned digital assets and settlement workflows, with separate identity, asset-token, and settlement components.
- Implemented settlement state transitions with duplicate-settlement prevention, zero-identifier validation, completion events, and automated Hardhat tests for success and failure paths.

EDUCATION

Hudson Valley Community College - Coursework