

KIARI ABDELKADER

Senior Protocol Engineer | Cross-Chain Settlement & On-Chain Matching | Solidity / EVM

Remote · abdel.kiari@gmail.com · www.kiari-abdelkader.com · github.com/KIARI-Abdel · x.com/AI_Sifr_
Public proof: 15 mainnet contracts and third-party audit reports (Grey Swan, 2025), linked from kiari-abdelkader.com

SUMMARY

Senior protocol engineer, 5 years building production EVM systems, 4 in DeFi. **Sole owner of the smart contract layer** at Portal to Bitcoin, a **\$110M+ funded** cross-chain protocol backed by **Coinbase Ventures**: I designed and shipped the trustless BTC-to-EVM settlement engine, the on-chain orderbook replacing the AMM, ERC-6909 multi-token accounting and validator staking with slashing. 15 contracts on Ethereum and Portal chain, in production with **no recorded exploit**. I take a protocol from **empty repo to audited mainnet**: the architecture calls, the implementation and the audit gate are all mine. I also conduct security audits, including a full audit of an institutional OTC desk in production.

TECHNICAL SKILLS

- **Protocol design**: cross-chain settlement, messaging, atomic swaps (HTLC), on-chain orderbook and matching, staking and slashing, multi-token accounting (ERC-6909), vaults (ERC-4626), account abstraction (ERC-4337)
- **Smart contracts**: Solidity 0.8.x, Yul and inline assembly, EVM internals, gas and storage optimization, upgrade patterns (UUPS, Transparent, Diamond), access control
- **Security**: security audits, threat modeling, reentrancy and flash loan vectors, MEV-aware design, audit lifecycle ownership and audit readiness, Slither, Echidna, fuzz and invariant testing
- **Deployment and governance**: deployment infrastructure, Gnosis Safe multisig operations and batch scripts, upgrade and access-control policy, monitoring (Tenderly), CI/CD
- **Tooling**: Foundry (Forge, Cast, Anvil), Hardhat, OpenZeppelin, Chainlink oracles, Ethers.js, Viem, TypeScript, Python, Claude Code and custom agent tooling

EXPERIENCE

Senior Solidity & EVM Engineer · Portal to Bitcoin · remote · Jan 2024 – Jun 2026

\$110M+ funded non-custodial DeFi protocol backed by **Coinbase Ventures**; contract layer, empty repo to mainnet.

- Designed and shipped the full EVM contract layer: 15 contracts across Ethereum and Portal chain. TGE September 2025; phased mainnet rollout September to November 2025.
- Made the call to replace the inherited AMM with an on chain orderbook designed for atomic swap settlement: limit and market orders, matching, and a direct handoff to the HTLC engine.
- Rebuilt the orderbook engine on a red black tree with storage packing and transient storage, cutting the matching engine's gas cost per trade 80%, from 142K to 28K.
- Built the trustless atomic settlement engine (HTLC-based) for non-custodial BTC-to-EVM operations; stress-tested past 14M settlements on testnet, 400K peak daily transactions, 750K wallets.
- Owned the external audit as the release gate: scoped the Grey Swan audit across 16 Solidity files, closed the critical finding the day it opened, and shipped every remediation before mainnet launch.
- Conducted a full security audit of Portal's institutional OTC desk, covering the EVM contract surface and its TypeScript integration, delivered as a formal findings report.
- Designed the system, not just the contracts: built the deployment infrastructure and governance machinery, routing every mainnet deployment and privileged operation through Gnosis Safe scripts under a process I authored.
- Sole reviewer for every Solidity PR and primary technical decision maker for EVM architecture; 95%+ coverage with fuzz and invariant suites as the merge bar; mentored 4 engineers.

Solidity Engineer · Blockcerts · Feb 2022 – Jan 2024

- Owned Solidity development for enterprise blockchain products; led strategic initiatives, interviews and mentoring.
- Set the security bar for the engineering team: internal audits and security-first review as the release standard.

CTO & Blockchain Lead · Orivium (part-time) · Jun 2022 – May 2023

- Architected blockchain gaming infrastructure on Arbitrum; built and led the team; \$350K NFT sales in the first hour.

Co-Founder & CTO · Tok'Art · Oct 2021 – Feb 2022

- Designed and launched an ERC-721 NFT marketplace on Layer 2 rails: 400x faster and 50x cheaper than mainnet.

EDUCATION

EPITECH, information technology engineering program · 3W Academy, fullstack web development