Marisa Okonjo Senior Smart Contract Developer

New York, NY · marisa.okonjo@gmail.com · +1 646-555-0129 · linkedin.com/in/marisaokonjo

PROFILE SUMMARY

- **Senior Smart Contract Developer** with **8 years** on **rollup bridge and governance contracts** for **an Ethereum L2**, after 4 years building **regulated stablecoin contracts**.
- Works in **Solidity 0.8**, **Yul** and **Foundry**, with **Echidna** and **Certora Prover** for assurance, **OpenZeppelin** governance contracts and **Tenderly** for monitoring on **Ethereum and Arbitrum**.
- Strong in **cross-chain message and withdrawal logic**, **upgrades through DAO governance** and **invariant design**, and brings a written threat model to every design review.
- Partners with **protocol researchers**, **the node software team**, **external auditors** and **chain operators** building on the stack, and takes the **contracts on-call rotation** one week in five.
- Leads **pre-audit reviews** for the contracts team, mentors **3 engineers** on invariant testing, and wrote the team's **upgrade proposal checklist**.

TECHNICAL SKILLS

Contract Languages:	Solidity, Yul, TypeScript, Go (reading), Python
Frameworks & Libraries:	Foundry, Hardhat, OpenZeppelin Contracts, viem
Security & Static Analysis:	Slither, Aderyn, threat modeling, Solodit
Fuzzing & Formal Tools:	Foundry invariant tests, Echidna, Medusa, Certora Prover, Halmos
Token & Proxy Standards:	ERC-20, EIP-712, ERC-2612, transparent proxies, UUPS, ERC-7201
Chains & L2 Networks:	Ethereum, Arbitrum One, Arbitrum Nova, Base
Ops, Oracles & Monitoring:	Safe multisig, Tenderly, OpenZeppelin Monitor, Etherscan verification, Dune

EDUCATION

Rutgers University — **B.S. in Computer Science** — New Brunswick, NJ · Sep 2014 to May 2018

WORK EXPERIENCE

Offchain Labs — **Senior Smart Contract Engineer** — New York, NY · Apr 2022 to Present

- Rewrote the outbox withdrawal path for Arbitrum One and Nova in **Solidity 0.8** with custom errors and leaner event data, cutting gas per withdrawal on Ethereum from 132,000 to **97,000**.
- Ran audit prep for 4 contract releases with threat models, scoping docs and **Slither** in CI, bringing high and medium findings per external audit from 9 to **2**.
- Wrote **Echidna** and Foundry invariant suites for the dispute contracts and proved **23 Certora Prover rules** on bond accounting before the external audit started.
- Prepared **14 upgrade proposals** that went through DAO votes and a timelock, each with a storage layout diff, a fork test on mainnet state and a simulation link for voters.
- Built **Tenderly** and OpenZeppelin Monitor alerts for bridge balance drift and role changes, cutting time from alert to on-call response from 25 minutes to **6 minutes**.

Paxos — **Software Engineer, Blockchain** — New York, NY · Jul 2018 to Mar 2022

- Added **EIP-712** permit support and a pause role to ERC-20 stablecoin contracts holding **over $1B** in supply, with a full Hardhat test suite.
- Moved releases from manual scripts to **Hardhat** tasks with Gnosis Safe approvals, cutting release prep from 3 days to **4 hours**.
- Built an hourly supply reconciliation job in **Go** that compared minted supply with reserve records, catching **2 mint config errors** before any customer saw them.