

YASH KOLEKAR

Web3 Engineer | Mumbai, MH | [Portfolio](#) | [GitHub](#) | [LinkedIn](#)

KEY ACHIEVEMENTS

ETHOnline 2025: Won Hardhat track (\$2,250) for ChronoVault — ZK-powered TOTP 2FA smart wallet implementing RFC 6238 inside Circom circuits with ERC-4337 account abstraction; **Top 10 overall finalist**

ETHMumbai 2026: Won Best Privacy (BitGo) and Best AI Project tracks (\$1,100) with MeshSearch — ZK-committed queries, 3-hop ENS onion routing, x402 anonymous micropayments, and BitGo stealth-address disbursement exposed as an **MCP server**

Other wins: 1st Place Technothon 2k24, 2nd Place HackX 3.0 (15k INR), Best Repository Award HackByte 3.0 (GitHub), multiple ETHGlobal finalist placements

PROJECTS

MeshSearch

March 2026

TypeScript, Solidity, Semaphore ZK, x402, BitGo SDK, MCP, Hardhat, Next.js

- **ETHMumbai 2026 winner** — privacy-preserving agentic search: queries committed client-side with **Semaphore v4 Groth16 ZK proofs** (Poseidon hashing), routed through a **3-hop ENS-named onion relay network**, paid anonymously via **x402 USDC micropayments** on Base Sepolia.
- Integrated **BitGo stealth-address disbursement** to pay relay operators via fresh unlinkable wallet addresses per transaction; ships as an **MCP server** consumable by any AI agent (Claude, Cursor). 95+ tests across ZK, contracts, relay routing, and x402.

ChronoVault

October 2025

Circom, snarkjs, Solidity, ERC-4337, Hardhat, Viem, Wagmi, Next.js

- **ETHOnline 2025 Hardhat track winner, Top 10 overall** — implements the **actual TOTP algorithm (RFC 6238) inside Circom ZK circuits** using Groth16, generating client-side proofs verified on-chain with an auto-generated TOTPVerifier.sol — no Merkle tree shortcuts.
- Built on **ERC-4337 account abstraction**; every transaction requires a ZK proof of TOTP knowledge without exposing the secret on-chain. 35 tests with real proof generation and contract verification.

idb-client-generator

October 2024 – Present

NPM Package, Prisma, TypeScript, Browser APIs, IndexedDB

- Prisma-compatible IndexedDB client generator (@prisma-idb) with **90%+ API coverage**, outbox-style sync, and **169+ automated tests** — active PR to the official Prisma Next generator; reduces offline-first to a single dependency.

EXPERIENCE

Full Stack Intern

December 2025 – Present

Devfolio

Bangalore, Karnataka (Hybrid)

- Built a BullMQ-backed Google Sheets sync handling **5,000+ applications per event**; ensured data integrity across dynamic form schemas via idempotent jobs and automatic retries.
- Automated multi-repo releases using release-it and GitHub Actions; collapsed a 6-step manual pipeline into a single merge, saving **15–25 minutes** per release.

TECHNICAL SKILLS

Languages: TypeScript, JavaScript, Solidity, SQL

ZK & Crypto: Circom, snarkjs, Groth16, Semaphore v4, secp256k1 ECDH, AES-256-GCM, Poseidon

Web3 Stack: Hardhat, Ethers.js v6, Wagmi, Viem, ERC-4337, x402, ENS, Base Sepolia, IPFS

Infra & Tools: MCP SDK, BitGo SDK, Docker, GitHub Actions, Next.js, Turborepo, Vercel

EDUCATION

Vivekanand Education Society's Institute of Technology

CGPA 9.6

Bachelor of Engineering in Information Technology

September 2024 – June 2027