

Bohdan Pukhno

Lead Smart Contract Engineer, help Web3 teams ship smart contracts that survive production and audits · Solidity · EVM · Cairo · TON · DeFi · RWA · Cross-Chain · Security

me@b0gdaniy.xyz Ukraine / Remote / EU hours Portfolio

Summary

The "audits" part isn't a slogan. I've spent two years on the other side of the table at Hacken, which is why teams call me both before they deploy and after something has already gone wrong on-chain.
Lead Smart Contract Engineer, 5+ years in Web3 production.
Day job: leading smart contract architecture at Swarm, an EU-regulated tokenized asset platform. I built dOTC v2 (decentralized OTC settlement), Nifty Bundles (NFT-to-ERC20 vaults), and CCIP-based cross-chain RWA synchronization. All audited by PeckShield and Pessimistic. Deployments live on 10+ mainnets.
Side contract: multichain work for Belong.net across Solidity, Cairo (StarkNet), and Threaded Solidity (TON): NFT ticketing, token-gated access, and the $LONG token, now live on Binance Alpha, Gate, and MEXC. Contracts audited by Hacken.
Open to Lead, Senior, and Architect roles in protocols, DeFi, RWA, and security. Ukraine / Remote / EU hours.

Education

National Technical University of Ukraine 'Kyiv Polytechnic Institute'
PhD
Electrical, Electronics and Communications Engineering
Kyiv, Ukraine • Ends in June 2029

National Technical University of Ukraine 'Kyiv Polytechnic Institute'
Masters Degree
Electrical, Electronics and Communications Engineering
Kyiv, Ukraine • Ended in June 2025

National Technical University of Ukraine 'Kyiv Polytechnic Institute'
Bachelor's degree
Electronic engineering
Kyiv, Ukraine • Ended in June 2023

Experience

Swarm Markets — Berlin, Germany (Remote)
Lead Smart Contract Engineer — October 2024 - Present

- Lead smart contract architecture for Swarm's EU-regulated RWA platform: tokenized equities, U.S. Treasury products, ETFs, gold-backed assets, OTC settlement, staking, rewards, and vault infrastructure.

- Shipped dOTC v2 to production: Swarm's open-access decentralized OTC settlement protocol with atomic escrow swaps, Chainlink price feeds, and KYC/AML-gated execution. Passed PeckShield audit; live across Swarm's target mainnets.

- Architected and shipped new version of RWA with Chainlink CCIP-based cross-chain synchronization using mint-and-burn flows for metadata, approvals, and compliance-state consistency. One of the few production CCIP integrations for regulated RWA infrastructure.

- Built and shipped Nifty Bundles, an ERC721/ERC1155-to-ERC20 vault system enabling bundled NFT exposure and fractional ownership. Passed PeckShield audit; remediation also reviewed by Pessimistic.

- Own multiple production smart contract product lines, including a single RWA product line with 40+ deployed contracts across the full feature surface (tokenization, compliance, settlement, distribution).

- Maintain production deployments across 10+ mainnets: Ethereum, Polygon, Base, BSC, HyperEVM, Hedera, Plasma, Arbitrum, Optimism, Mezo, with per-chain configuration, deployment scripts, and upgrade flows.

- Set the team's smart contract engineering standards: architecture patterns, testing methodology, security review checklist, audit preparation flow, technical documentation. These are now the default baseline for new contract work and every subsequent external audit engagement.

- Review contract code from a small team of engineers and define contract-side interfaces for the frontend, backend, and indexer teams, including event schemas, API expectations, and failure-case handling.

Smart Contract Engineer October 2022 - October 2024

Joined to build out Swarm's contract layer for the EU-regulated RWA roadmap.

- Shipped Permission Manager as the foundational access-control layer for Swarm's RWA platform, the first significant production contract I owned end-to-end. It became the access-control backbone for tokenized equities, treasuries, and subsequent RWA product lines.
- Designed and shipped three generations of the OTC settlement protocol (PermissionedDotc, OpenDotc V1, and OpenDotc V2), iterating on swap mechanics, access patterns, and compliance gating across each version. OpenDotc V2 passed PeckShield audit and became the production OTC layer that ships today as dOTC v2.
- Built and integrated Chainlink price feeds into Permission Manager to enforce per-user spending limits in real time: on-chain regulatory control that gates transactions based on USD value relative to each user's compliance tier. This became the foundation for price-dependent compliance flows across Swarm's RWA stack.
- Established the team's contract testing and documentation patterns using Hardhat and Foundry, which became the audit-readiness baseline for every later engagement (PeckShield, Pessimistic).
- Owned remediation across early external audit cycles, converting audit feedback into permanent team checklist items and architectural guardrails carried forward into Lead-level work.

Belong.net Remote

Smart Contract Engineer — Multichain (Solidity, Cairo, Threaded Solidity) August 2024 - Present

Contract engagement on Belong Net's multichain Web3 platform: NFT ticketing, token-gated access, venue check-ins, referral rewards, and $LONG token utility.

- Shipped production Solidity contracts for the EVM platform, including ERC-721 AccessToken, ERC-1155 CreditToken, factory deployments, royalties, vesting wallets, escrow, staking, $LONG token logic, signature verification, and Belong CheckIn flows. Contracts live across the platform's supported EVM chains.
- Built Belong CheckIn protocol logic end-to-end: venue deposits, customer payments, promoter attribution, ERC-1155 credit accounting, staking-tier fees, escrowed payouts, and $LONG buyback/burn routing. This is the core economic loop of the Belong platform.
- Implemented DEX swap infrastructure for $LONG/USD-token flows across Uniswap/Pancake-style routers (V3/V4), including Permit2 approval handling, price-feed-based slippage checks, fork tests, and deployment scripts, enabling $LONG's listing on Binance Alpha, Gate, and MEXC.
- Shipped StarkNet/Cairo contracts (NFT factory, NFT minting, royalty receiver, referral logic, SNIP-12 hashing, and signature-based mint authorization), bringing Belong's NFT layer to StarkNet's execution environment.
- Built TON/Threaded Solidity contracts for TIP4 NFT collections (factory-based deployment, permit-based static/dynamic minting, TIP3 token payment handling, native TON payments, royalty splitting, referral commissions, and wallet deployment/callback handling), extending Belong's reach into the TON ecosystem.
- Wrote Hardhat, Foundry, StarkNet, and Locklift tests, mocks, deployment, upgrade, and verification scripts across EVM, StarkNet, and TON ecosystems. Maintained multi-ecosystem test and deployment coverage from a single contract codebase.
- Contracts audited by Hacken (Q4 2024 / Q3 2025 reports), published at audits.hacken.io/belong-net.

M0narch Kyiv, Remote

Smart Contract Lead / Advisor September 2025 - April 2026

- Led smart contract development for an on-chain iGaming platform focused on provably fair betting and fully on-chain game mechanics, live on Monad Mainnet and testnet, ahead of a full commercial launch.
- Designed Solidity-based contracts for betting flows, game settlement, payout mechanics, treasury and fee handling, plus reusable modules intended to support a multi-game roadmap.
- Integrated Pyth for fairness-critical game outcomes, enabling transparent on-chain verification of randomness, settlement, and payout logic. This is a core requirement for the provably-fair claim.
- Owned contract architecture, testing methodology, security hardening, and deployment workflows through pre-launch, including coordination with product and frontend teams on contract interfaces.

Hacken Remote

Smart Contract Auditor & Security Analyst October 2022 - July 2024

Focused on smart contract security across DeFi, DAOs, marketplaces, and token systems.

- Performed smart contract audits across tokens, staking and vesting systems, DAOs, marketplaces, upgradeable contracts, and DeFi protocols on EVM ecosystems, building deep familiarity with common attack surfaces and exploit

patterns.
- Identified vulnerabilities in access control, reward accounting, upgradeability flows, business logic, and oracle/integration patterns, with a focus on exploit prevention before production deployment.
- Through HackenProof, triaged and validated incoming vulnerability reports, reproduced issues, assessed severity and impact for client-facing security workflows.
- Applied secure development and gas-efficiency practices using Hardhat, Foundry, Slither, MythX, and OpenZeppelin patterns, the same toolchain I now use on the writer side of the table at Swarm and Belong Net.

Nethermind UK, Remote

Smart Contract Developer Intern — Cross-Chain & Emerging Ecosystems April 2024 - July 2024

Selected for Nethermind's Cross-Chain & Emerging Ecosystems research program, a focused engagement on interoperability patterns, secure design, and emerging execution environments outside mainstream EVM.
- Researched and prototyped smart contract solutions across cross-chain and emerging execution environments, focusing on interoperability primitives and performance-aware architecture patterns.
- Worked on cross-chain contract logic and technical investigations for emerging blockchain infrastructure. Interoperability patterns from this program directly shaped the CCIP architecture shipped at Swarm.
- Contributed to code reviews, technical documentation, and internal knowledge sharing around deployment flows, ecosystem integrations, and protocol behavior across non-standard EVM environments.

Projects

Swarm Audits (PeckShield, Pessimistic)
All reports

PeckShield Audits for Swarm:
Bundles audit
dOTC audit

Hacken Audit for Belong.net:
Link

Skills

Languages
Solidity, Cairo, Threaded Solidity, Noir, JavaScript/TypeScript

Standards
ERC-20, EIP-712, ERC-721, ERC-777, ERC-1155, ERC-1167, ERC-2981, ERC-4626

Frameworks
Node.js, Foundry, Hardhat, Locklift, Scarb, OpenZeppelin, Solady, TheGraph, Grafana

Integrations
Chainlink CCIP, Chainlink Price Feeds, Pyth, Permit2, RWA, OTC, Uniswap (all versions), AAVE, Balancer, Compound

Ecosystems
EVM, StarkNet, TON

Blockchains
Ethereum, Polygon, HyperEVM, BASE, BSC, Hedera, Optimism, Arbitrum, Plasma, Mezo, Starknet, TON

Certifications

Certified Bitcoin Professional (CBP)
CryptoCurrency Certification Consortium (C4)

Certified Ethereum Professional (CEP)
CryptoCurrency Certification Consortium (C4)

Awards

2nd Place Hackathon Winner - Buggy DAO
September 2022
Kyiv Tech Summit

Aragon Bounty Winner - Aragon DAO
September 2022
Kyiv Tech Summit

Aragon Bounty Winner - Police Oracle
September 2022
Kyiv Tech Summit

Chainlink Hackathon Participant - Hata
November 2023
Chainlink

Startup Winner - Hata
March 2024
Vacuum Deep Tech Acceleration

Languages

Ukrainian
Fluent, Native

English
Professional Working, C1

Publications

Springer Book Chapter on Blockchain-Based Electricity Settlement in Smart Grid Systems September 2025