

STAFF / LEAD ENGINEER

✉ hello@ovasylenko.com

📍 Brazil • UTC-3 • Remote

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Oleksii Vasylenko

18 years shipping distributed systems, fintech, and cryptographic products. I work from low-level Rust services through typed SDKs and React interfaces, and I lead teams when the problem needs both architecture and delivery.

SELECTED RESULTS

2,400+

workflow
instances/sec

4,000+

orders/sec

3x

order-book depth

15

engineers led

CORE CAPABILITIES

Rust, TypeScript, React, Node.js, Solidity

Matching engines and real-time market data

PostgreSQL, Redis, RabbitMQ, Docker, AWS, GCP

Distributed systems and durable execution

ZK proofs, smart contracts, and applied cryptography

Architecture leadership across remote teams

EXPERIENCE

Security Researcher at Independent Security Research

2026 – Present • Remote

Conducted independent security research on Threshold Network / tBTC, reviewing its distributed threshold-signing client (Go) and bridge contracts (Solidity)

Identified a quorum-synchronization invariant gap in the protocol's post-signing completion path, where signing-done accounting was not bound to the exact attempt's selected signer set – a protocol liveness / safety-margin (griefing) class issue rather than key, signature, or fund compromise

Go • Solidity • Threshold Signatures (tECDSA) • Bitcoin • Lattice Cryptanalysis • Immunefi

Full-Stack Developer at Bitsten exchange

June 2024 – Feb 2025 • Remote

Architected matching engine processing 4000+ orders/sec with sub-millisecond latency

Engineered liquidity bots integrating multiple market maker APIs, improving order book depth by 3x

React • Node • TypeScript • Nest • RabbitMQ • KeyDB

Web3 Developer at Panther Protocol

June 2023 – June 2024 • Remote

Built zk-SNARK wallet engine supporting multiple blockchains with UTXO-based transaction model

Identified and resolved critical vulnerabilities in Circom circuits during security audits

React • Service Workers • zk-STARK • zk-SNARK • Circom • Elliptic Curve Cryptography

Web3 Developer at Mailchain

March 2022 – June 2023 • Remote

Integrated major blockchains including Ethereum, ENS, and Near for wallet-to-wallet messaging

Created TypeScript SDKs with comprehensive documentation for third-party developers

React • D3 • Node.js • WebSockets • Ethers • Rollup • Webpack

Frontend Architect at PropertyGuru

April 2020 – March 2022 • Singapore

Engineered unified payment service adopted across 4 product teams, eliminating duplicate code

Implemented Webpack Module Federation reducing deployment coupling and release cycle from weeks to days

React • NestJS • D3 • Node.js • Tableau • WebSockets

Head of Product Development at Data Laboratories

August 2015 – December 2018 • Singapore

Led team of 15 engineers across 3 time zones, shipping on tight deadlines

Architected D3-based data visualization platform processing millions of data points in real time

React • D3 • WebSockets • .NET Core • CoffeeScript

EARLIER WORK & EDUCATION

Frontend Architect at ZuZu Hotels • Rust Developer at Kobvel Software Consulting • Senior Full-Stack Developer at Xen Technologies • Full-Stack Developer at Lohika

Bachelor of Computer Engineering with honors, Sevastopol National Technical University • English and Portuguese
