

Ihor Khomutovskyi

Full-cycle engineer: web + hardware + AI

igorkhom@gmail.com · linkedin.com/in/igor-khomutovskyi-8630812a · Kyiv, Ukraine

SELECTED PROJECTS

xost.kiev.ua — Own product

The site and billing panel of a Ukrainian shared-hosting service: from storefront and plan selection to payment, automatic provisioning and support. Full cycle, one developer, live in production.

- Cart, orders and invoices; term pricing with a computed discount — the percentage is never stored, it is derived against the monthly price so it can never drift from reality
- Monobank acquiring: invoice creation, signature-verified webhook, idempotent payment settlement
- Renewal without signing in — a 30-day signed link from the email: the list of services, the amount and one button
- Plesk REST API v2 for creating and checking hosting accounts; domain registration through FREEhost.UA over raw TCP on port 690 with XML commands and a per-command md5 signature

PHP 8.4 · Laravel 13 · MySQL · Blade · vanilla JS · Plesk API v2 · Monobank API · Telegram Bot · GA4 · AlmaLinux

chd.kiev.ua — Own product

CHD Maker: shop with my own electronics, a 3D-model library and video tutorials for the maker community.

namashinu.com.ua — Store + service

A tyre and wheel store with its own service centre: selection by car, size or licence plate, online booking for fitting and alignment, Nova Poshta delivery. The site was migrated off an old WordPress build without losing search positions.

- Three ways to find tyres: by car make and model, by size, and by licence plate or VIN through a baza-gai integration
- EPREL: official EU energy labels pulled straight into product pages, covering 91.5% of the catalog

- Catalog: 1,818 tyres (564 winter, 1,033 summer, 221 all-season) and 1,196 wheels — alloy, forged and steel, R8 to R23
- Services booked on site: fitting, tyre repair, wheel straightening and powder coating, alignment, seasonal storage

Laravel · PHP 8.4 · MySQL · Blade · EPREL API · baza-gai API · Nova Poshta API · Telegram Bot · Google Merchant

winner-trade.com.ua — Storefront + ERP

A B2B platform for a veterinary-diagnostics distributor: a bilingual storefront plus a full ERP layer in the admin panel — orders, warehouse, tiered pricing, counterparties, roles — with two-way 1C/BAS integration. Solo from zero to production: architecture, backend, frontend, integrations, deployment, QA.

- Bilingual catalog (UK/EN) with database-level translation, hreflang, locale route prefixes, sitemap and schema.org markup
- B2B logic: prices hidden from guests, per-counterparty price tiers, RFQ flow, one-screen quick order, PDF invoices
- Hero builder: the main banner is edited visually — drag-and-drop elements in both languages, percentage positioning, photo cropping, composition stored as JSON, with a server-side value whitelist as the security boundary
- Warehouse workflow: manager → storekeeper (send to picking → picked → shipped with tracking) with timestamps, status history and push notifications; a separate storekeeper cabinet behind a permission gate

PHP 8.4 · Laravel 12 · Filament 3 · Livewire 3 · Alpine.js · Tailwind 3 · MySQL · Redis + Horizon · Laravel Pulse · spatie · dompdf · Playwright

art-agro.pl — Laravel · PL/EN

Polish spare-parts store for combines, tractors and seeders: catalog by machine and brand, customer account, two currencies.

b2b.art-agro.pl — B2B · PL/EN

A B2B portal for agricultural spare parts: a bilingual PL/EN interface with machine-translated catalog, multi-currency pricing, role-based B2B prices, nightly imports from 1C and a supplier database, and an admin panel with an import log and translation manager. Production on Octane, Sentry, ~130 automated tests.

- Faceted catalog (categories, brands, machine models, part type, price, availability) with sorting that handles price-less items correctly through a multi-currency COALESCE in SQL
- Search across name, SKU, tags, brand, description and translations — the source data is Ukrainian, so without this a Polish query returned nothing; plus live suggestions
- Price ladder: quantity tiers → B2B price for signed-in customers → retail; prices stored in UAH and shown in PLN/USD/EUR at admin-managed rates
- All VAT arithmetic lives in a single OrderTotals class so cart, checkout and admin recalculation can never diverge; stock reservation without backorders

PHP 8.4 · Laravel 13 · Octane / Swoole · MySQL · Redis · spatie/permission · Sentry · PHPUnit 12 · Blade · systemd + cron · rsync deploy · OpenAI API

art-agro.com.ua — Migrated to Laravel

Migrating an agricultural-parts store from OpenCart 2.3 (PHP 5.6) to Laravel 12: the full 40,800-product catalog moved with every legacy URL preserved, four languages with AI-translated content, Meilisearch search, a Filament admin panel and Octane in production. Product page response time dropped from 1.0–2.3s to 0.04–0.19s.

- Idempotent OpenCart import command (949 lines, stepwise): 40,823 products, 230 categories, 53 brands, 545 PDF catalogs, 266 customers, 1,317 orders, 164,376 slugs and 136,537 OEM cross-references across 27,713 products
- Reverse-engineering the legacy schema: the real source of cross-references turned out to be oc_product_description.tag, brand copy lived in oc_manufacturer_description
- Four languages: Ukrainian without a prefix, the rest under /ru/, /en/, /pl/, per-language slugs, hreflang, 457 interface strings in dictionaries
- SEO as a first-class requirement: every legacy URL preserved (catalog lives at the root behind a catch-all slug resolver), a redirects table, 308 permanent redirects, canonicals, schema.org, a 104,169-URL sitemap across six files

PHP 8.4 · Laravel 12 · Octane / Swoole · Filament 5.7 · Livewire 4 · Blade · Alpine.js · Tailwind 3 · Meilisearch · MariaDB · OpenAI API · Docker

b2b.art-agro.com.ua — Wholesale cabinet

A closed B2B cabinet for wholesale customers: a 43,600-product catalog with live per-warehouse stock, rank-based personal discounts, cart, orders, PDF documents and an admin panel for managers. The portal merges three independent sources — a 1C exchange (CommerceML 2.05), the live OpenCart store database and a supplier database — into one catalog with a single pricing and availability logic.

- 1C import (~880 lines): streaming XMLReader over 140+ MB export files without loading them into memory, incremental and full exports, a separate delete.xml
- Protection against partial or corrupt exports: a file fingerprint (size + mtime) to skip unchanged files, a readiness check, an import block when the catalog shrinks sharply, and auto-closing of stuck runs
- Nightly catalog enrichment: matching 1C items against a 40,000-product OpenCart database — 1C supplies prices and stock, OpenCart remains the donor of descriptions, specs, analogues and images
- Image pipeline: 4 GB of originals outside public, thumbnails generated in a nightly batch and served straight by nginx without PHP — roughly 25× faster, with an on-demand fallback on 404

PHP 8.4 · Laravel 12 · Filament 3 · Vue 3 · Inertia 2 · Tailwind 4 · MySQL x3 · Redis · DomPDF · nginx

superior-laundry.com — USA · EN

Industrial laundry equipment for hotels and hospitals (USA): catalog by market segment, blog, lead forms.

parts.superior-laundry.com — Store subdomain

Parts store for industrial laundries: catalog by manufacturer, manuals library, part-lookup request form.

graef.com.ua — Brand store

Official store for German GRAEF kitchen appliances: video reviews, Apple/Google Pay, instalments, service pages.

katerynaconnection.art — Try it on your wall

An artist's portfolio with an interactive “try the painting on your wall”: the visitor picks a work, a frame and a room — or uploads a photo of their own wall — and sees the canvas at true proportions. Laravel 13, Blade with vanilla-JS islands, two languages with distinct slugs, an admin panel with interior calibration and a fitting log.

- Scale is computed from the frame's px_per_cm, not by eye: the admin calibrates a room by drawing a line along an object of known width — a door, a socket, a tile; coordinates are stored in original pixels, so resizing the window never shifts the calibration
- The same maths exists twice — in PHP and in JS — and both are run against nine shared test vectors with a 0.5 px tolerance; the frame scales with the canvas because moulding width is a physical quantity

- Visitor wall photos: private disk, served only through a signed URL bound to the uploader's session, re-encoded to JPEG (which also strips EXIF — a phone shot carries someone's home GPS) and deleted automatically after 72 hours
- CSP with no unsafe-inline or unsafe-eval: Alpine.js was removed for it — fifteen lines of plain JS replaced the framework and the bundle fell from 19.6 KB to 1.2 KB gzipped

PHP 8.4 · Laravel 13 · Blade · vanilla JS · Vite · MariaDB · Intervention Image 3 · ffmpeg 7 · Raspberry Pi worker