

Plamen Markov

Senior Backend Engineer — Laravel / PHP · REST APIs · LLM Integration

plamen326@gmail.com · Pleven, Bulgaria · Europe/Sofia (UTC+2/+3)
github.com/plamen911 · linkedin.com/in/plamen-markov-14254965 · Fully remote · Available as a B2B contractor



PROFESSIONAL SUMMARY

Senior backend engineer with **20+ years of production PHP, all of it remote**. Expert in Laravel and MySQL, specialising in **third-party integration layers** and **legacy modernisation** — four systems taken from PHP 5.6 to modern Laravel or modern PHP, three of them migrated with the old and new platforms live in parallel. Two distinct AI capabilities: writing production code with Claude Code daily for over a year, and shipping **LLM features inside products** — a constrained tool-calling agent, an MCP server and vision-based document OCR. Long engagements are the pattern: 20 years with one US studio, 13 years as principal developer on one system, sole developer of another since 2012.

SELECTED MEASURABLE RESULTS

- 18 years** — my first commercial product (2008), deployed at 10+ client firms, still running
- 86.5%** — of a 60,000-line delivery platform authored personally; its lead for 13 years
- 26,000+** — insurance policies migrated live, cutover parity-tested
- PHPStan 9** — plus an 878-test suite, gating every push in CI
- 20 years** — continuous remote engagement with one US software studio (2005–2025)
- 4 systems** — modernised from PHP 5.6 to modern Laravel / PHP 8.2
- 436 tests** — introduced to a 3-year-old production SaaS that had almost none

AI ENGINEERING

- AI-assisted development** — how I write code
Claude Code every day for over a year inside **client production codebases**, not side projects: AI-assisted refactoring, test generation and debugging. The scarce skill is not generating code — it is reviewing what was generated, at senior depth, before it reaches paying customers.
- AI inside the product** — what I build
Designed and shipped a **tool-calling LLM reporting agent forbidden from computing any figure itself**: every number comes from one of fifteen curated tools with enum-constrained schemas, so the model picks from a fixed filter catalogue instead of free-forming a query. Gated behind an authorisation check and a feature flag because it surfaces personal data, and kept off the public MCP endpoint. Also vision-based document OCR (17 fields from a vehicle registration) and two MCP servers, one on npm automating the motor-insurance register check (case study: github.com/plamen911/go-insurance-checker). **The value here is constraint design, not ML research**. Separately I built and deployed a **RAG** product of my own end to end — **fire-expert.uk**, below.

WORK EXPERIENCE

- Smartwary, Bulgaria — Senior PHP Developer (B2B contract)** Aug 2025 – present
Remote. Built **Browswave**'s pricing-intelligence platform until the client took it in-house in October 2026 — market intelligence for the consumer-electronics industry. 489 commits in 13 months; roughly 45% of tracked source.
- Ivanov New Media Studio LLC — Nantucket, MA, USA — PHP Web Developer (contractor)** 2005 – 2025
Remote throughout. Twenty years as the studio's long-term remote developer, building and maintaining production software for its US clients — among them Nantucket Energy, whose fuel-delivery platform I led for thirteen years.
- Direct clients — Independent contractor** 2008 – present
Remote. Sole developer on three production systems, all still in service and 100% my code: **Hipokrat** (hipokrat.net), an occupational-medicine application written in 2008 and since deployed for 10+ client firms — web-hosted, on-premises and standalone; **NPP Kozloduy**'s occupational-health system (since 2012); **General Broker**'s policy platform (17+ years).

KEY PROJECTS

- Browswave — PriceLens & PromoManager · multi-tenant pricing SaaS** 2025 – 2026
Laravel 10 · PHP 8.2 · MySQL 8 · stancl/tenancy · Shopify REST + GraphQL · Docker · AWS
• **Database-per-tenant across 24 tenant databases** — consumer-electronics retailers and Shopify merchants across Bulgaria and the UK; the largest holds 35,500 products, 83,700 competitor records and roughly 18 million rows of pricing history.

- **Shopify rate-limit resilience across the tenant fleet** — proactive leaky-bucket pacing from the GraphQL cost extensions and the REST call-limit header, *Retry-After*-honouring retries with jittered backoff capped at 32 s, idempotent webhooks deduped on webhook ID, batched bulk mutations.

General Broker — insurance platform · sole developer, 100% of the code

2009 – present

[Laravel 13](#) · [PHP 8.4](#) · [Livewire 3](#) · [MariaDB](#) · [Redis](#) · [laravel/ai](#) · [Symfony 7.3](#) · [React 18/19](#) · [Bitbucket Pipelines](#) · [GitHub Actions](#)

- **Made one place own the money.** Browser and server rounding disagreed by a cent, enough to block saves, so every premium, tax and total now comes from one server endpoint. Saves are transactional, non-destructive; invariant checks repair only under an explicit flag, after a snapshot.
- **Shipped a circuit breaker for the outbound integrations** after an upstream served an expired certificate for ten weeks. Three states in one cache entry, a lock so exactly one probe runs; wired to that upstream first, behind a seam the others join one at a time. 14 tests.
- **Made the platform report its own failures** — throttled error e-mails, failed-job alerts, an external queue heartbeat (after a stale scheduler lock stalled production for 17 hours) and a weekly alarm announcing only newly drifted records.
- **Built the property-quoting service alongside it** — a separate *Symfony* 7.3 API (20 Doctrine entities, 57 routes, JWT with anonymous tokens), a React 18 quote wizard and a React 19 admin console.
- **Quality gates on both codebases** — PHPStan level 9, 878 tests and dependency audits gate every push on the Laravel platform; the Symfony service's first suite, 219 tests, surfaced an authorisation gap reaching admin data.

My own products — fire-expert.uk, Claude plugin, ADR Zone · sole developer

2026

[Laravel 12](#) · [PHP 8.5](#) · [PostgreSQL 17](#) + [pgvector](#) · [OpenAI](#) + [Cohere](#) · [Claude skills](#) · [n8n](#) · [React Native](#) · [Expo](#)

- **Claude plugin that drafts court-grade forensic fire reports from phone photos** — 5–6 h down to 10–15 min, with an LLM-judge eval suite and personal-data checks in code.
- **Built and deployed a RAG product end to end, alone** — a Bulgarian-language retrieval-augmented generation assistant that gathers case facts conversationally, retrieves comparable past reports and emits a structured court-format expert report. Deployed on a 4 GB VPS: Docker Compose, TLS, nightly *pg_dump* backups, scripted *git archive* deploys with smoke tests.
- **ADR Zone — React Native / Expo app, live on the App Store and Google Play** (apps.apple.com/bg/app/id6769773386). Offline dangerous-goods reference over a bundled 1,818-substance SQLite database, searched by name, UN number or placard code. Relevance ranking added after a substring match buried pure chlorine behind hundreds of chloride compounds - in an emergency-response tool that is a safety property, not a UX nicety - and a Cyrillic case-fold layer, because Hermes' *toLowerCase* and SQLite's *COLLATE NOCASE* are both ASCII-only.

Nantucket Energy — propane & heating-oil delivery platform · principal developer

2012 – 2025

[PHP 8.1+](#) · [Laravel 9](#) · [Livewire](#) · [MySQL 8 \(112 tables\)](#) · [Alpine.js](#) · [Docker](#) · [Larastan](#) · [AWS S3](#)

- **Thirteen years, two systems.** I wrote the original platform from scratch, then built its Laravel replacement and the bridge between them. ~52,000 of ~60,000 surviving lines (86.5%) and 1,481 of 2,499 commits — principal author, active every year the project ran, verified by line-level *git blame*.
- **Integrated four independent tank-telemetry vendors across four transport styles** — hand-built SOAP envelopes to a .NET endpoint, two session-authenticated REST APIs, and a LoRaWAN webhook decoding raw hex payloads into battery voltage and tank percentage — plus the scheduled batch ingestion behind them.

NPP Kozloduy — occupational-health & medical-surveillance system · sole developer

2012 – present

[PHP 8.2](#) · [MySQL/MariaDB](#) · [Symfony components](#) · [Monolog](#) · [Pest](#) · [PHPStan](#) · [air-gapped intranet](#)

- **Rebuilt in place from PHP 5.6 to PHP 8.2 with no rewrite and no flag-day cutover** — 114 domain services extracted from 172 flat page scripts, DTOs with Symfony Validator, Monolog and Pest. A parallel Laravel rewrite was started, evaluated and **rejected**, with the reasoning recorded in four ADRs including an explicit “no framework migration” decision.

TECHNICAL SKILLS

Backend	PHP 8.x (20+ yrs) · Laravel (expert) · Symfony 7 (production API) · Doctrine ORM · Livewire · Node.js
Data	MySQL / MariaDB (expert) · PostgreSQL 17 + pgvector (vector similarity search) · query-plan & index diagnosis · Redis · SQLite · MongoDB (basic)
AI	Claude Code in production (daily, 1+ yr) · RAG (pgvector + full-text hybrid, Cohere rerank) · laravel/ai · MCP servers · tool-calling agent design · OpenAI vision OCR
Integrations	REST · GraphQL · SOAP · JSON-RPC 2.0 · webhooks · SFTP · SAML/OAuth flows · rate-limit resilience · Shopify · Amazon (Keepa)
Resilience	circuit breaker (shipped) · leaky-bucket rate-limit pacing · jittered backoff · idempotent webhooks · deadlock diagnosis & retry · queues · heartbeat alerting
Testing & quality	PHPUnit · Pest · Laravel Dusk · PHPStan / Larastan to level 9 · Pint · CI pipelines with dependency-audit gates
Mobile	React Native 0.81 · Expo SDK 54 · TypeScript · offline SQLite · EAS build & submit (App Store + Google Play)
Frontend & infra	Livewire · Alpine.js · React 18/19 (two production front ends) · Vue 2 · Svelte 4 · Tailwind · Docker · AWS (EC2, S3) · nginx / php-fpm · Git

EDUCATION

SoftUni — PHP Web Developer, 2019 (894 h); Front-End Developer with JavaScript, 2020 (562 h)

TU Gabrovo — Computer Systems & Technologies, 2005

LANGUAGES & AVAILABILITY

Bulgarian — native · English — professional working proficiency

B2B via a VAT-registered BG company; up to full-time.