

Artem Morozov

Senior Full-Stack Engineer · DevOps · Systems Architect

artmorzov@gmail.com · github.com/dragekorn · Moscow, Russia (open to relocation) ·
Citizenship: Moldova

PROFESSIONAL SUMMARY

Senior Full-Stack Engineer with 14+ years of experience designing and delivering scalable web applications, APIs, and cloud infrastructure. Expert in the modern JavaScript / TypeScript stack, Python / FastAPI back ends, DevOps automation, and system architecture. Proven ability to lead end-to-end project ownership from concept through production deployment — including building a complete end-to-end encrypted messenger (GChat) from cryptographic protocol through mobile client and marketing site, solo. Skilled in legacy system modernization, microservices architecture, real-time integrations, and high-performance database design. Passionate about solving hard technical problems while maintaining clean, maintainable code.

CORE COMPETENCIES

Backend Development	Node.js (Express, NestJS) · TypeScript · Python 3.12 (FastAPI, async SQLAlchemy 2.0, asyncpg, arq, Alembic) · Django · RESTful API design · GraphQL · WebSocket · Microservices · System Architecture
Frontend Development	React.js · Next.js · Vue.js · Redux Toolkit · Astro 5 · Tailwind CSS 4 · Vite · SSR / SSG · Responsive Design
Mobile Development	Flutter 3 · Dart 3 · Riverpod · go_router · Isar (encrypted local DB) · platform channels (Swift / Kotlin) · flutter_webrtc · APNs / PushKit · FCM · CallKit / ConnectionService · biometric auth
Cryptography & Security	X3DH · Double Ratchet · AES-GCM-256 · Ed25519 / Curve25519 (libsodium, PyNaCl, Dart cryptography) · Argon2id · TLS 1.3 · end-to-end encryption protocol design · zero-trust relay architecture · CSP / HSTS / Permissions-Policy hardening · RFC 9116 security.txt & coordinated disclosure
Databases & Caching	PostgreSQL (advanced) · MongoDB · Redis · Prisma ORM · TypeORM · SQLAlchemy 2.0 async · query optimization · schema design
DevOps & Infrastructure	Docker · Docker Compose · CI/CD pipelines · Coolify (self-hosted) · Traefik · Nginx · Let's Encrypt · Cloudflare · AWS S3 · Linux (Ubuntu) · Git · GitHub Actions
Cloud & Integrations	Firebase (Cloud Messaging, Admin SDK) · AWS S3 · WhatsApp Business API · Telegram Bot API · DaData · Ostrovok API · payment gateways · SMS / Email services
Additional Skills	RabbitMQ · real-time communication · SSL/TLS management · server administration · API documentation (Swagger / OpenAPI) · RBAC / ACL implementation · Telegram Bot development · test automation

Founding Engineer / Solo Product

2026 – Present

GChat — End-to-End Encrypted Messenger · personal product

- Designed and shipped a production-grade E2E encrypted messenger (iOS, Android, public site) from scratch — cryptographic protocol, backend relay, mobile client, deployment pipeline, legal surface, and marketing page. Every layer owned solo.
- Built the cryptographic core on **libsodium / PyNaCl** (server) and the Dart **cryptography** package (client): **X3DH** handshake over **Curve25519 / Ed25519** identity keys, **Double Ratchet** for per-message forward-secret symmetric keys, **AES-GCM-256** authenticated transport, **Argon2id** for local key-wrap, and **TLS 1.3** relay. The server only forwards opaque ciphertext and metadata-minimised envelopes — it cannot read messages even under legal compulsion.
- Engineered the backend as a **FastAPI** (Python 3.12) async service with **SQLAlchemy 2.0 + asyncpg** over **PostgreSQL**, **Redis** for pub/sub and session cache, **arq** for background jobs (TTL media sweep, push fan-out), **Alembic** migrations, **structlog** + **Prometheus** instrumentation, and a stateless **WebSocket** transport that horizontally scales behind a sticky-session router.
- Account model is **phone-number-free** — users register with a cryptographic recovery phrase that never leaves the device; the server stores only a public identity key and verification salt, not a recoverable identity. Media is ephemeral with server-side **TTL garbage collection**.
- Delivered a cross-platform **Flutter** client architected around **Riverpod** (state), **go_router** (navigation), **Isar** (encrypted local store), **Dio** (HTTP), and native platform channels for **APNs / PushKit**, **FCM**, **CallKit / ConnectionService**, Android **FLAG_SECURE** screenshot protection, iOS screenshot detection with peer notification, **flutter_webrtc** for encrypted 1:1 voice / video, and **local_auth** biometric unlock.
- Implemented the marketing site as a statically generated **Astro 5 / Tailwind 4** app with full **EN / RU** localization (parity enforced via TypeScript discriminated-union types), a custom **WebGL** background shader with DPR-aware rendering and **prefers-reduced-motion** handling, SVG-based cryptographic-flow diagrams animated via SMIL, automated Open Graph image generation via **sharp**, and Plausible analytics — total HTML + CSS + JS shipped **under 72 KB gzipped per page**.
- Operated the full deployment surface: multi-stage **Docker** images, **Coolify**-driven CI/CD with per-app GitHub watch-path filtering (push-to- **landing/** never rebuilds the backend and vice-versa), **Traefik** + **Nginx** reverse proxies with automatic Let's Encrypt, hardened **CSP / HSTS / X-Frame-Options / Permissions-Policy** headers, gzip compression, staged preview deployments with **noindex** gating, and an **RFC 9116 security.txt** disclosure flow.
- Authored privacy, terms, and security policies that match the actual architecture (no phone numbers, no persistent metadata, no server-side decryption) — not boilerplate — and designed the coordinated-disclosure process end-to-end.

TECH STACK: Flutter · Dart · Riverpod · Isar · WebRTC · Python 3.12 · FastAPI · SQLAlchemy 2.0 (async) · asyncpg · PostgreSQL · Redis · arq · Alembic · Pydantic v2 · PyNaCl · cryptography · structlog · Prometheus · X3DH · Double Ratchet · Ed25519 · Curve25519 · AES-GCM-256 · Argon2id · TLS 1.3 · Astro 5 · Tailwind 4 · WebGL · SMIL · GSAP · Docker · Coolify · Traefik · Nginx · Let's Encrypt · GitHub Actions · Plausible · Poetry · Linux

Senior Full-Stack Developer / DevOps Engineer

Mar 2025 – Mar 2026 · 13 months

ООО "ДС" (DomikSmart) — Remote

- Architected and built a CRM system from scratch (React / Vite / Redux) for short-term rental property management, serving 50+ listings with real-time availability calendars and booking management.
- Designed a modular PostgreSQL database using Prisma ORM with complex relationships (properties, bookings, users, payments) and optimised queries for analytics.
- Implemented two-way messenger integrations with WhatsApp Business API and Telegram Bot API for automated customer communication and booking confirmations.
- Developed a Next.js public website with SSR for SEO, increasing organic visibility by **40%** within 3 months.
- Built complete CI/CD infrastructure using Docker + Coolify + GitHub Actions, reducing deployment time from manual (2+ hours) to fully automated (5 minutes).
- Configured Traefik reverse proxy with automatic SSL/TLS via Cloudflare, managing multiple subdomains and enabling zero-downtime deployments.
- Implemented Redis caching layer for performance optimization and a WebSocket server for real-time booking notifications.
- Created an administrative panel with RBAC, allowing non-technical staff to manage listings, bookings, and customer communications.

TECH STACK: React · Next.js · Node.js · TypeScript · PostgreSQL · Prisma · Docker · Coolify · Traefik · Cloudflare · WhatsApp API · Telegram API · WebSocket

Full-Stack Developer / DevOps Engineer · Contract

Apr 2025 – Aug 2025 · 5 months

ООО "ДС" (Rekcar.ru) — Remote · concurrent engagement alongside the DomikSmart CRM project

- Led complete legacy-system modernisation including Node.js version upgrade, TypeScript migration, and elimination of technical debt across 50+ endpoints.
- Designed and implemented a modular REST API architecture (6 core modules: Users, Cars, Drivers, Sponsors, Promotions, Marketplace) with proper separation of concerns and reusability.
- Optimised PostgreSQL queries including complex filtering, pagination, and statistical aggregations for driver metrics and performance analytics.
- Implemented comprehensive API documentation using Swagger / OpenAPI, enabling seamless frontend-backend collaboration and third-party integrations.
- Built an advanced role-based access control (ACL / RBAC) system using TypeScript decorators and NestJS guards for administrators, sponsors, and drivers with granular permissions.
- Developed a responsive admin panel (React + Vite + Tailwind CSS) from scratch with dashboards, data tables with pagination, and modal management interfaces.
- Integrated DaData service for automatic vehicle validation (VIN, model, year) and address validation, improving data quality by **35%**.
- Implemented multi-channel notifications (email with EJS templates, SMS gateways, Firebase Cloud Messaging) for transactional messaging.
- Containerised the entire application with Docker, configured development / staging / production environments, and implemented CI/CD pipelines for automated deployments.
- Managed cloud infrastructure including AWS S3 for media storage with image preprocessing and CDN caching.

TECH STACK: Node.js · TypeScript · Express · NestJS · React · Vite · PostgreSQL · TypeORM · Docker · Docker Compose · AWS S3 · Firebase · DaData · Swagger

Backend Developer

Jun 2024 – Aug 2024 · 3 months

ООО "РЕМОУТ ИНДАСТРИЗ" — Moscow, Russia (Remote)

- Developed new API features and core functionality for a SaaS product serving **10,000+ users**.
- Optimised PostgreSQL and MongoDB queries resulting in a **45%** improvement in API response times for high-traffic endpoints.
- Configured and managed RabbitMQ message queues for asynchronous task processing (email notifications, report generation, data exports).
- Set up Docker development environments with proper networking and volume management for seamless team collaboration.
- Performed database refactoring to improve schema design, reduce redundancy, and support horizontal scaling.

TECH STACK: Node.js · PostgreSQL · MongoDB · RabbitMQ · Docker

Backend Developer

Mar 2024 – Apr 2024 · 2 months

WBPROD — Tolyatti, Russia

- Developed a customer dashboard with authentication and authorization modules from specification.
- Integrated microservices using REST API architecture and implemented service-to-service communication.
- Refactored legacy API code and optimised query performance, reducing response latency by **30%**.
- Implemented automated tests for critical business logic using Jest and Supertest.

TECH STACK: Node.js · TypeScript · PostgreSQL · Microservices

Full-Stack Developer

Dec 2023 – Mar 2024 · 4 months

Inspectrum Clinic — Ufa, Russia

- Maintained and extended the clinic management system with new booking and patient-management features.
- Built a patient portal allowing users to schedule appointments and access medical records.
- Developed an admin interface for clinic staff to manage schedules, patients, and services.
- Improved database performance through query optimization and proper indexing.

TECH STACK: Node.js · Vue.js · PostgreSQL · Docker · PHP (Yii2)

Node.js & Python Developer

Aug 2023 – Mar 2024 · 8 months

ООО "Архи-Про" — Moscow, Russia

- Developed Telegram bots for automation and customer engagement, covering scheduling, webhooks, and multi-service data synchronisation.
- Built a test-automation framework using Python for regression testing across multiple microservices.
- Implemented scheduled job processing using Node.js for data synchronization and reporting.

TECH STACK: Node.js · Python · Telegram Bot API · PyTest

Technical Director

Jan 2023 – Aug 2023 · 8 months

Baklazhan Studio — Latvia (Remote)

- Led technical architecture and development strategy for a browser-based game project.
- Directed game development using Node.js for backend and Unity game engine, coordinating frontend and backend teams.
- Managed infrastructure setup and deployment pipeline for game servers.
- Mentored junior developers on architecture best practices and code standards.

TECH STACK: Node.js · Unity Engine · Game Architecture

Senior Freelance Developer

Aug 2014 – Jan 2023 · 8.5 years

Independent · Multiple clients

Independently developed **30+ high-load web services and microservices** for diverse clients across multiple industries:

- **Payment & Financial Systems:** built payment-splitting solutions for the hospitality industry with PCI compliance, real-time transaction processing, and comprehensive audit logging.
- **E-commerce & Marketplace:** designed and implemented scalable product catalogs, shopping carts, checkout flows, and admin dashboards.
- **SaaS Platforms:** developed API-first applications with multi-tenant architecture, role-based access control, and comprehensive monitoring.
- **Real-time Applications:** implemented WebSocket-based communication for live chat, notifications, and collaborative editing.
- **Telegram Bot Development:** built 15+ production bots featuring scheduling, webhooks, long-running workers, and database integration.
- **Data Processing:** built ETL pipelines for data synchronization across multiple platforms.

TECH STACK: React · MongoDB · PostgreSQL · Python (Django, Flask, FastAPI) · Node.js (Express, NestJS)

TECHNICAL SUMMARY

Languages	JavaScript · TypeScript · Python · Dart · SQL · Bash
Backend (JS)	Node.js · Express · NestJS
Backend (Python)	FastAPI · SQLAlchemy 2.0 async · asyncpg · Pydantic v2 · Alembic · arq · structlog · Prometheus
Frontend	React · Vue.js · Next.js · Astro 5 · Redux Toolkit · Tailwind CSS 4 · Vite · WebGL (GLSL)
Mobile	Flutter · Dart · Riverpod · go_router · Isar · flutter_webrtc · platform channels (Swift / Kotlin)
Cryptography	X3DH · Double Ratchet · AES-GCM-256 · Ed25519 · Curve25519 · Argon2id · libsodium / PyNaCl
Real-time & Notifications	WebSocket · WebRTC · APNs · PushKit · FCM · CallKit · ConnectionService
Databases	PostgreSQL (advanced) · MongoDB · Redis · Isar
DevOps / Infrastructure	Docker · Docker Compose · CI/CD · Coolify · Traefik · Nginx · Let's Encrypt · Cloudflare · AWS S3 · Linux · Poetry
APIs & Integrations	REST · GraphQL · WebSocket · Firebase · WhatsApp Business API · Telegram Bot API
Tools & Platforms	Git · GitHub · GitHub Actions · Prisma · TypeORM · RabbitMQ · Swagger / OpenAPI · Plausible
Specialisations	System architecture · Microservices · Legacy modernisation · Real-time applications · E2E encryption · DevOps · API design

EDUCATION

Higher Education in Information Technology — Gagarin Institute of Technology (ИТК им. Гагарина), 2013

Continuous learning: advanced system-design and architecture patterns · DevOps best practices and containerization · modern JavaScript / TypeScript ecosystem · applied cryptography and zero-trust design · cloud infrastructure and automation.

LANGUAGES

Russian — native **Moldovan** — native (citizenship: Moldova)

English — B1 (actively improving — daily practice for professional communication)

ADDITIONAL INFORMATION

Open to opportunities

- Open to relocation across the EU (Germany, Netherlands, Portugal, Nordics, Cyprus) and the UK. Moldovan citizenship simplifies Schengen mobility.
- Interested in Senior / Staff Engineer, Technical Lead, and founding-engineer roles — startups and established product teams alike.
- Target rate: **€60–90/hour contract** or **€110–160K/year full-time** (flexible — adjusted to local market and role scope).
- Available to start immediately or with a reasonable notice period.

Notable achievements

- Authored and shipped a production end-to-end encrypted messenger with a **custom cryptographic stack** (X3DH + Double Ratchet + AES-GCM-256 over Ed25519 / Curve25519) across mobile, backend, and web — **solo, end-to-end, zero third-party crypto SDKs**.
- Marketing site shipped at **< 72 KB gzipped per page** with a custom WebGL shader, bilingual type-enforced content, and a hardened security-header policy.
- Self-hosted CI/CD on Coolify with per-app GitHub watch-path isolation, staged preview → production promotion, and automated Let's Encrypt rotation.
- Built and deployed 30+ production systems across fintech, e-commerce, SaaS, hospitality, and real-time verticals.
- Consistently delivered projects on time while maintaining high code-quality standards.
- Mentored junior developers and contributed to team growth.

Interests

- Applied cryptography, end-to-end encrypted systems, zero-trust architecture, and privacy-preserving product design.
- Golang, C++, C# — currently expanding language expertise.
- Game development and real-time systems.
- Fintech and payment processing solutions.
- Building scalable infrastructure and DevOps automation.
- Team leadership and technical mentoring.