## Ivan Hilkov

Lead Frontend Engineer — Moscow, Russia

#### **Contact Information**

Email • LinkedIn • Telegram • CV.pdf

## **Professional Summary**

Results-driven Lead Fullstack Engineer with 17+ years of experience delivering scalable React/Next.js applications and high-performance backend systems for streaming, geospatial, and Al-powered domains. Proven expertise in modern Go backend development, React/TypeScript frontends, and Al/ML service integration. Strong track record in team leadership (up to 8 engineers), performance optimization, and end-to-end product delivery from MVP to production scale. Demonstrated success in reducing system latency by 40%, improving release stability by 80%, and rapidly consolidating complex legacy systems into unified microservices architecture. Expert in building high-performance teams, implementing robust CI/CD processes, and driving technical architecture decisions for product-focused startups leveraging cutting-edge Al technologies.

## **Key Achievements**

- System Integration: Unified 3 legacy projects into cohesive microservices MVP within 1 month, establishing scalable architecture and comprehensive development processes for AI-powered platform
- **Performance Optimization**: Reduced API latency by 40% handling 700,000 requests per second during peak traffic events at leading video streaming platform
- Rapid Delivery: Delivered geospatial platform MVP in 3 months, securing 1st place at Gazprom "Unmanned Biathlon" and 10+ enterprise contracts worth \$1M+ annually
- **Technical Innovation**: Implemented resumable uploads up to 100 GB with pause/resume support using tus.io protocol
- Team Leadership: Successfully led cross-functional teams of up to 8 engineers with structured mentoring and career progression programs

# **Professional Experience**

#### ALMATICA — Lead Developer & Tech Lead — Aug 2025 — Present

Collective intelligence platform startup connecting humans, Al agents, and organizations for complex problemsolving

- Conducted comprehensive technical audit of 3 legacy projects (frontend, backend, ML services), identifying critical architectural improvements and consolidation opportunities
- Architected and implemented microservices MVP using monorepo approach, unifying disparate components into cohesive platform with centralized infrastructure
- Led cross-functional team of 3 developers, establishing development processes including task planning, grooming, code reviews, and CI/CD pipelines
- Built REST API using Go 1.25 with Fiber framework and GORM ORM, implementing JWT authentication with Kinde Auth integration and RBAC system
- Developed modern React 18 + TypeScript frontend with Tailwind CSS and shadon/ui components, featuring responsive design and form validation using React Hook Form + Zod

- Integrated ML/AI services using Python, FastAPI, LangGraph, and LangChain with OpenAI/Anthropic APIs for autonomous agent capabilities
- Containerized all services using Docker and Docker Compose, establishing unified development environment and sandbox deployment for stakeholder demonstrations
- Created comprehensive technical documentation, project roadmap, and OpenAPI/Swagger specifications for seamless team collaboration

#### Bot Garden — Founder — Jun 2025 — Present

Al-powered Telegram bot platform startup

- Achieved rapid domain expertise in Telegram Bot API and LLM integration, building 4 AI-powered bot prototypes in 2 months
- Successfully integrated multiple LLM providers (GPT, Perplexity, Claude) demonstrating ability to quickly master emerging AI technologies
- Built comprehensive suite: echo bot (<a href="hello-bot">hello-bot</a>), GPT-powered Q&A bot (<a href="hello-ai-bot">hello-ai-bot</a>), English writing assistant (english-teacher-bot)
- Developed shared runtime and orchestration platform (<u>botgarden-core</u>) with automated deployment via GitHub Actions
- Integrated WATA.pro payment system and established CI/CD pipeline for rapid iteration and deployment

### START — Lead Frontend Engineer — Jan 2023 — May 2024

Leading Russian video streaming platform serving 5M+ users with Smart TV and web content delivery

- Optimized application performance to handle 700,000 requests per second during peak traffic events, reducing API P95 latency by 40% through query pattern optimization and caching strategies
- Built and shipped Next.js features including "Movies on TV" and "TV Series" sections with integrated player and TV channel storefront
- Developed TV programming section with schedules and catch-up TV functionality, improving user engagement and content discovery
- Refactored monolithic payment system into modular Redux components, reducing codebase by 50% and improving maintainability for subscription workflows
- Implemented custom A/B testing library reducing experiment development time by 30%, enabling faster iteration on user experience improvements
- Led and mentored team of 4 frontend engineers, establishing technical standards and conducting architecture reviews

#### Tvigle — Lead Frontend Engineer — May 2024 — Oct 2024

Online cinema platform

- Enhanced video player capabilities with advanced ad SDK integrations (Yandex Ads, VK Ads) via MRAID protocol
- Upgraded ad serving infrastructure from VAST 2.0 to VAST 4.0 standard, improving ad delivery reliability and performance
- Developed React Native mobile application with cross-platform Android/iOS support
- Optimized mobile user experience through responsive design adaptations and performance improvements

#### Skyeer — Lead Frontend Engineer — Apr 2017 — Jan 2023

Geospatial software startup specializing in drone mapping solutions for enterprise clients

- Architected and developed comprehensive web-GIS platform using React, Redux-Saga, and advanced mapping technologies (Mapbox, Cesium, Potree), establishing market position as most accurate measurement solution in geospatial industry
- Delivered platform MVP in 3 months securing 1st place at Gazprom "Unmanned Biathlon" with ±0.02 m<sup>3</sup> accuracy, leading to 10+ enterprise contracts worth \$1M+ annually
- Implemented advanced technical features: resumable uploads up to 100 GB via tus.io, 360° panorama visualization, point cloud processing (10M+ datasets with 60fps WebGL rendering)
- Created reusable UI component library with 50+ components and React Cosmos playground, reducing development time across multiple projects
- Led cross-functional team of 8 engineers (4 frontend, 2 backend, 1 QA, 1 Documentation Writer) implementing Agile methodologies with weekly 1:1s and structured career progression
- Established comprehensive QA automation framework with 800+ Selenium E2E tests, improving release stability by 80% and enabling continuous deployment
- Implemented internationalization (i18next) supporting English and German markets with comprehensive technical documentation platform

#### Career Development Period — May 2015 — Apr 2017

Focused on React ecosystem mastery and modern frontend architecture transition

- Liga Stavok (Sep 2015 Jan 2016): Built scalable UI/UX library with 40+ React components and Redux state management
- OneTwoTrip (*May 2015 Sep 2015*): Developed payment systems and optimized search functionality with significant performance improvements
- Ivideon (Sep 2016 Apr 2017): Extended video surveillance platform with custom timeline components and mobile adaptations
- Transitioned expertise from jQuery/BackboneJS to modern React ecosystem, developing deep knowledge in Redux architecture and component design patterns

### Sovzond — Senior Frontend Engineer — Jun 2013 — May 2015

Satellite imagery and geospatial data provider serving government and commercial sectors

- Designed and delivered comprehensive "Satellite Imagery Archive" SPA using BackboneJS, Leaflet, and Bootstrap with dynamic search capabilities
- Implemented polygon drawing tools, WMS cadastral data integration, and virtualized table scrolling for large datasets
- · Built cart and account management system for satellite imagery ordering and download workflows
- Led migration from ExtJS to BackboneJS with full REST API integration and white-label theming capabilities
- · Initiated regression testing program, establishing QA processes and hiring first dedicated testing specialist

#### **Technical Skills**

Programming Languages: TypeScript, JavaScript, Python, Go

Frontend Technologies: React (18), Next.js, Redux, Redux-Saga, React Native, HTML5, CSS3, TailwindCSS,

shadcn/ui, WebGL

Backend Technologies: Node.js, Go (Fiber, GORM), FastAPI, Flask, Express, JWT Authentication

Databases & Caching: PostgreSQL, Redis

DevOps & Testing: Docker, Docker Compose, GitHub Actions, GitLab CI/CD, Cypress, Jest, Selenium, E2E testing

**Specialized Domains**: Geospatial (CesiumJS, Mapbox GL JS, Leaflet, Potree), Media Streaming (FFmpeg, HLS/DASH), Al/ML APIs (GPT, Claude, Perplexity, LangGraph, LangChain, CrewAI)

**Development Tools**: orval (API client generation), Kinde Auth, OpenAPI/Swagger, Docker containerization, automated deployment pipelines

## **Leadership & Management Skills**

- Team Leadership & Cross-functional Collaboration (up to 8 engineers)
- Technical Architecture & System Design
- · Performance Optimization & Database Scaling
- Agile/Scrum Methodologies & Sprint Planning
- · Mentoring & Knowledge Transfer Programs
- A/B Testing & Data-driven Decision Making

#### Education

#### **Bachelor of Science in Theoretical Physics**

Kuban State University — Graduated 2010

Relevant Coursework: Advanced Mathematics, Statistical Mechanics, Computational Physics programming, Mathematical modeling, Statistical analysis, and Algorithm development

#### **Portfolio & Demonstrations**

- Geospatial Platform Demo: UI/UX Skyeer gource.io: 4 years of Skyeer
- Bot Garden Projects: hello-bot I hello-ai-bot I english-teacher-bot

#### Additional Information

- Availability: Immediate availability for Lead Frontend Engineer roles at product-focused startups
- Work Preferences: Remote-first, open to hybrid arrangements and international contracts
- Target Industries: Al-powered development platforms, streaming media, geospatial technologies

Full CV.pdf