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UA



# Daniyl Kovaliov

Senior Full-Stack Engineer · AI & Systems

📍 Zagreb, Croatia 📅 13+ years experience 13+ років досвіду ✉️ daniil.kovaliov@gmail.com

 GitHub

 Telegram

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## WHAT I AM LOOKING FOR

AI is not a tool I use — it is the lens through which I see every process. Context windows, prompt design, token efficiency, multi-agent orchestration — I work with this daily and teach it to others.

I am looking for a team that sees automation not as the goal, but as the means. **The goal is freedom** — for engineers to do real architectural work, for users to spend less time in apps. If you are building that kind of future, let us talk.

## SUMMARY

Senior Software Engineer with **13+ years** building production systems, including AI agents, LLM pipelines, and multi-agent orchestration. Built and deployed a production AI partner system with multi-channel integration, agentic workflow orchestration, and self-learning capabilities. Co-founded an AI startup with DSPy self-learning pipelines and RAG. Proven product mindset: crisis turnarounds, 85% latency reduction, 12x workflow automation. Shipped production code in Go, Python, and Kotlin each within 2 weeks of onboarding to the stack.

13+

Years in production

85%

Latency reduction

12x

Workflow automation

30+

AI assistant skills built

## TECHNICAL SKILLS

### AI & LLM

Multi-Agent Orchestration OpenAI API Anthropic API Gemini API RAG DSPy PydanticAI  
Prompt Engineering MCP Protocol FAISS pgvector Hallucination Testing

### LANGUAGES

Python TypeScript Node.js Go C#.NET Kotlin

### BACKEND

FastAPI asyncio PostgreSQL MongoDB Redis Kafka Microservices Event-Driven

### FRONTEND

React Next.js Chrome Extensions Telegram Bot API

### CLOUD & DEVOPS

AWS DigitalOcean Docker Kubernetes Cloud Functions CI/CD Trunk-Based Dev

### PRACTICES

Clean Architecture TDD Playwright / E2E Observability Product-First

## EXPERIENCE

### Contract Software Engineer

Self-Employed

Nov 2025 – Present

Remote

- AI Personal Assistant setups for clients — LLM integration, workflow automation, Telegram bots
- CRM systems development and integration (Python, React)
- Programming mentorship and technical consulting

Stack: Python · FastAPI · React · DigitalOcean · Claude Code · OpenAI · Anthropic · Gemini

### Co-founder & AI Engineer

Tenderium

Nov 2025 – Present

Remote

- Built DSPy self-learning pipeline for AI-powered tender analysis with automated prompt optimization

- Designed RAG system with FAISS/pgvector for knowledge retrieval; integrated 5 governmental procurement APIs across Ireland and UK (300–400 tenders/day), architecture designed for multi-country expansion
- Integrated governmental procurement APIs for real-time tender monitoring
- Implemented hallucination detection and output validation for critical business decisions

Stack: Python · FastAPI · TypeScript · React · DSPy · RAG · FAISS · pgvector · PostgreSQL

## Senior Software Engineer

Aug 2023 – Nov 2025

🌐 Remote

LetyShops

- Architected anti-fraud detection system: 100% precision on labeled test dataset; identified 17% of users with anomalous behavior patterns requiring review
- Delivered 7 CI/CD pipelines, standardizing build time from 12 to 3 minutes across Kotlin, Python, and Android teams
- Established SRE practices: Datadog monitoring, full-stack observability
- Shipped production code across Go → Python → Kotlin each within 2 weeks of onboarding

## Senior Software Engineer / Tech Lead

Aug 2020 – May 2023

🌐 Remote

PragmaTech

- Org diagnostic for startup in crisis (lost 80% clients post-war): 20+ stakeholder interviews, identified key delivery blocker, proposed org solution — company pivoted and survived
- Mentored 3 engineers: 2 mid→senior, 1 junior→mid
- Automated daily researcher workflow from 2 hours to 10 minutes (12x improvement)

## Senior Software Developer

Aug 2019 – Aug 2020

📍 Kyiv

Reply.io

*B2B cold outreach CRM (Sales Engagement Platform)*

- Reduced async email delivery workflow from 10 minutes to 1.5 minutes (85% faster) via throttling redesign and parallelization
- Investigated and created POCs for back-end performance optimizations
- Developed smart Chrome extension reducing average session from 15 to 5 minutes
- Refactored unit test suite — 2x faster and more stable in CI
- Navigated complex legacy codebase independently — production-ready in 3 months

Stack: C# · .NET Core · React · Azure · Redis · SQL · Message Queue

## Software Developer → Acting Team Lead

Aug 2018 – Aug 2019

📍 Kyiv

Ciklum

*Large-scale international marketing platform*

- Delivered first customer demo in 48 hours, directly securing additional project funding

- Developed UI plugins and services from scratch
- Integrated new services into Facebook marketing pipeline
- Bridged communication gaps between 3 development teams, reducing cross-team blockers
- Stepped up as Acting Team Lead for 4-person team, maintaining velocity through transition
- Reverse-engineered undocumented legacy C# codebase (CQRS + Event Sourcing) independently — production-ready in 3 months

Stack: C# · Knockout.js · TypeScript · AWS · CQRS · Event sourcing · NoSQL

## Software Engineer → Senior

May 2013 – Aug 2018

Kyiv

### EPAM Systems

- Won internal hackathon — built observability system for 22-microservice infrastructure in 24 hours (user flow tracking + performance monitoring)
- Contributed to enterprise migration of startup product with 17-person team over 6 months (frontend + backend), served as architecture advisor on event-driven design
- Engineered flagship credit-origination platform: services, CI/CD, Web UI — greenfield to production (2016–2018)
- Extracted microservices from monolith, automated infrastructure checks (2016)

2013 – 2015 · EARLY PERIOD

- Major back-office banking platform with multiple applications — developed new functionality, fixed bugs, improved CI/CD, delivered key features for risk management module

Stack: C# · WCF · WPF · WinForms · SQL

## Support Analyst

2010 – 2013

Kyiv

### CMS Cameron McKenna

British International Law Firm · Bridges client needs and technical solutions

- Resolved complex user requests — translated business and legal workflows into technical solutions
- Shared knowledge across systems and processes, enabling non-technical staff
- Participated in infrastructure setup for Kyiv office
- Built foundation for understanding clients as humans first, technologists second

## PERSONAL PROJECTS

S.A.G.E. Framework

KITT — AI Partner System

### Schema-Aware Guided Evolution

- 22-step agentic workflow engine with BDD, schema-aware guardrails, and human approval gates — enables first-pass feature implementation in complex services with long-term maintainability
- Schema-aware safety gates and auto-learning from production incidents

### Production, Daily Use

- Built production AI assistant with custom 4-layer architecture: Letta memory core, LettaBot channel fork, deterministic workflow engine, tiered human-approval tool system
- Fixed critical OAuth bugs in open-source Letta framework; 780-line idempotent bootstrap, 1,100+ memory chunks
- Stack: Python · TypeScript · Letta · MCP · Docker · Telegram Bot API

## EDUCATION

### MSc in Cybernetics & Specialist

Taras Shevchenko National University of Kyiv

2007 – 2014

Specialist  
2012

MSc  
2014

- Mentored and coordinated 50 students using Agile practices as part of academic project development team
- Delivered project features to faculty: bridged student team and academic requirements

## BEYOND CODE



### Improv Theatre Facilitator

900+ hours · 200 participants · team of 4



### AI/LLM Community

Active contributor & researcher