

Ilia Likhanin

AI Engineer · C# / .NET, Python, language models · development with AI coding agents

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SUMMARY

22 years in IT (since 2004). For the last 8, software developer at a medical center: built and rolled out more than 10 programs and services (C# / .NET, Python, Firebird, Excel/VBA) that run every day — call speech analytics on language models, lab results integrated into the medical system with built-in AI agents, tracking of medical charts with long-range RFID (UHF), and a building safety system on microcontrollers. Before that, 13 years at a retail chain, growing from assistant system administrator to head of IT. I work end to end: from the problem statement to production and support.

SKILLS

Development: C# / .NET (up to .NET 10: ASP.NET Core, WPF, WinForms) · Python · Java (Android) · SQL · 1C:Enterprise 8.3 · Excel/VBA · C/C++ for microcontrollers (AVR, ESP32) · Next.js, TypeScript

AI and language models: Gemma and Qwen on llama.cpp (custom builds for NVIDIA Pascal) · Claude via OpenRouter · GigaAM speech recognition · data anonymization · structured JSON output · development with AI coding agents (Claude Code, Cursor, Codex)

Databases: Firebird · MS SQL Server · PostgreSQL · SQLite

Infrastructure: Windows Server · Hyper-V · IP telephony (SIP) · networks and Wi-Fi · UHF RFID · GSM gateways

EXPERIENCE

Medical center — Software Developer

2018 – 2026 (on staff until 2022, then on contract)

- **Call speech analytics (Python + language models).** Pipeline: recordings from the IP PBX → speech recognition (GigaAM) → correction of recognition errors (Gemma) → anonymization → each call analyzed on 36 parameters in JSON (Qwen) → Firebird database → report builder. The models run on the clinic's own servers. 4,000–6,000 calls a month, 25,000+ in six months. **Result:** the director received a detailed report on lost patients, patient requests and front-desk performance.
- **Lab results integrated into the medical system (C# / .NET 10, WPF, ASP.NET Core, Firebird).** The module that handles results from two laboratories is integrated into the clinic's medical information system with built-in AI agents: e-mail intake, extraction of results from PDF and matching to the patient, SMS via a GSM gateway, e-mail, printing. **Result:** staff time on lab results fell from about 4 hours a day to 30 minutes.
- **Tracking of outpatient charts with long-range RFID (UHF, C#, Java/Android).** 5 fixed readers and 12 antennas, a C# server, IP camera snapshots, an Android app for the handheld reader: finding a chart, programming and recovering tags. **Result:** 20,000–25,000 charts tracked; reusing tags removed the yearly purchase of 6,000–7,000 new ones.
- **“Electronic Nurse” — an AI assistant for doctors (pilot project, C# / .NET 10, Python).** Records the appointment, recognizes speech, drafts the medical documentation and shows past appointments and lab trends on one screen.
- **Language models on our own hardware.** Local servers on NVIDIA Pascal GPUs (custom llama.cpp build) with a task balancer in Python; the model ran for 30 days without a failure. Migrated the projects from .NET 8 to .NET 10.
- **Building safety system (ATmega / ESP32, C/C++).** Wireless panic buttons in 24 rooms with a central panel, 4-channel emergency lighting with 8 hours of battery backup, an emergency voice alert panel. **Result:** the clinic received its building safety certificate.
- Also: IP telephony and call reports (C# / .NET 10, SQLite), electronic outpatient records, tracking of regulated medications, management reports in Excel/VBA.

Fuel company (gas station chain) — 1C 8.3 projects

2023 – 2024 · contract

- Designed and built real-time data exchange between discount card processing and 1C 8.3. **Result:** the gas station chain moved from 1C 7.7 to 1C 8.3 step by step.
- Extended the 1C 8.3 configuration for the company's car service.

Retail chain — from assistant system administrator to Head of IT

2004 – 2018

- Head of a three-person IT department.
- IT setup of every new store as the chain grew from 5 to 67: computers, cash registers, scanners, scales, video surveillance.
- Infrastructure of two offices, about 180 PCs: Windows Server, Hyper-V, backups, 1C 7.7–8.3, MS SQL Server, Firebird, PostgreSQL.
- A 1C data exchange program over several independent channels, monitoring of 1C services and retail platforms; networks and seamless Wi-Fi.

EDUCATION

- 2023 – 2027 (graduating in March 2027): Synergy University, Bachelor's in Information Systems and Technologies, part-time.
- 2023: professional retraining in Software Development Technology, 822 hours, MUTs DPO TsPP training center (Moscow).
- 2020: professional retraining in System Administration and Information Technology, 520 hours, MUTs DPO TsPP training center (Moscow).
- 2016: 1C:Professional certificate; courses in configuring and administering 1C:Enterprise 8 (2010–2016).
- 2005: vocational school, electrician.