

MAXIM DERKACHEV

Full Stack Developer & Technical Leader

Girona, Spain | max.derkachev@gmail.com

linkedin.com/in/mderk | github.com/mderk | Remote work preferred

PROFESSIONAL PROFILE

Senior Full Stack Developer with 15+ years of experience building high-traffic web applications, online games, and data-intensive platforms. Python/Django and React/TypeScript at the core, with production experience in Go, Java, and Next.js. Led teams of 3–8 developers, shipped products with \$1M+ revenue. Early adopter of AI-augmented development — built my own open-source tooling (Memento) and apply it across all current projects.

AI-AUGMENTED DEVELOPMENT

I've been building my workflow around AI coding assistants since early 2024 — Claude Code, Cursor, Gemini, GPT — using them across every project I take on. To make this work reliably, I pair AI with Spec-Driven Development and TDD: the specs keep the AI on track, the tests catch when it drifts.

This led me to create **Memento** (github.com/mderk/memento) — an open-source Claude Code plugin that generates structured project documentation (Memory Bank), development skills, and workflow automation. It includes a stateful workflow engine (MCP server) with checkpoint/resume and parallel execution. I use it in all my current projects.

PROFESSIONAL EXPERIENCE

NDA, Contract Full Stack Developer | June 2026 – Present

Girona, Spain (Remote) · Contract

End-to-end delivery of internal and customer-facing tools for a game publisher — released products, analytics services, and internal platforms.

- Shipped a title to Steam with full-cycle production support.
- Built a player analytics service that predicts monetization behavior from early gameplay logs.
- Designed a centralized feedback ingestion pipeline routing player reports to Jira Cloud, with CRM tooling for support operators.
- Deployed a machine translation service based on my open-source project Tradusco — automated translation of multi-thousand-string corpora into dozens of languages.
- Built the publisher's internal ad placement system for cross-promotion across their game portfolio.

Tech Stack: Python, FastAPI, Django, React, TypeScript, PostgreSQL, Redis, LLM APIs

NDA, Full Stack Lead | Dec 2025 – May 2026

Girona, Spain (Remote) · Contract

Sole developer responsible for all software around a mathematical optimization model for oil extraction — everything except the model itself.

- Built the deployment pipeline for compute-heavy optimization models using GCP and Google Batch.
- Developed a statistics and analytics service for model run results.
- Implemented the full web application: Next.js/React frontend, FastAPI backend, API layer.
- AI-augmented workflow throughout: Claude Code/Memento for backend, GPT/Cursor for frontend.

Tech Stack: TypeScript, Next.js, React, Python, FastAPI, GCP (Google Batch, Cloud SQL), PostgreSQL, Docker

Praxium AI, Backend Tech Lead | Sept 2025 – Feb 2026

Girona, Spain (Remote)

Lead backend development for a medical imaging platform that enables radiologists to review and annotate mammography studies with integrated AI analysis capabilities.

- Designed an end-to-end DICOM processing pipeline that automated what was previously a manual, hours-long process: ingestion from medical devices, normalization, storage via Google Healthcare API, routing to AI analysis providers, and result visualization for clinicians. Reduced the full cycle from hours to minutes.
- Built event-driven infrastructure on GCP (Cloud Run, Compute Engine, Cloud SQL, Healthcare DICOM storage, Pub/Sub) for medical-grade reliability.
- Integrated multiple AI providers for automated mammography analysis with results rendered in the platform's web tools.

Tech Stack: DICOM handling Go microservices on GCP (Cloud Run, Pub/Sub, Google Healthcare); TypeScript client/server (Cloud Run), customized Java-based DIMSE/DICOM WEB routing solution (GCP CE VM); PostgreSQL (Cloud SQL); GitHub Actions (CI/CD), Docker everywhere

NDA, Technical Lead | March 2022 – September 2025

Istanbul, Türkiye – Girona, Spain (Remote)

Developing an online game. Architecture and implementation, infrastructure and tools. Leading a small collective of professional developers with a broad skillset.

- Architected, developed and released a successful and complex online game. Developed a robust game configuration solution for game designers.
- Set up an AI-assisted development process that made building tools and new features several times faster.

Tech Stack: Python, Django, Javascript, React, MobX, PIXI.JS/Spine, PostgreSQL, Redis, Docker, Kubernetes, AI coding assistants, LLM APIs

SoftWise, Game Department, Technical Lead | June 2015 – March 2022

St. Petersburg, Russia

Building web browser-based games and applications with focus on scalability and performance.

- Architected and developed multiple commercially successful online games, generating over \$1M in revenue each, from scratch.
- Designed and optimized backend and frontend software, PostgreSQL and Redis data stores for game mechanics and analytics.
- Hired, managed, and mentored a team of full stack and frontend developers.

Tech Stack: React, MobX, PIXI.JS, Python, Django, PostgreSQL, Redis, Docker, Kubernetes

Earlier Career

Game Developers Collective, Lead Developer / Cofounder (2013–2015) — Browser-based game, \$1M+ revenue

Kotelock, Lead Developer (2010–2013) — Social games for VK and Facebook, 150K–200K DAU

Mixero, CTO & Lead Developer (2008–2010) — Social networking client for Twitter and Facebook

Books.Ru, CTO (1998–2005) — Russia's leading internet bookstore, built and scaled from early days

PERSONAL PROJECTS

Impossible Rocks, Owner/Founder | June 2025 – Present

Girona, Spain

End-to-end solo development of a mineral collection management platform for collectors, researchers, etc. to catalog specimens, organize metadata, and publish curated information. Currently building a white-label mobile app with in-app store for a commercial client on top of the platform.

Project overview:

- Users add specimens through quick text descriptions via web app, PWA, or Telegram bot. AI automatically structures and enriches the data — extracting mineral types, localities, quality assessments, and other metadata that would normally require tedious form-filling.
- The web application works offline-first for field use with automatic sync when online. Telegram bot provides an additional chat interface.
- Implemented hybrid search combining PostgreSQL full-text, trigram fuzzy matching, and semantic vector search (pgvector) for flexible specimen discovery.
- The backend combines Django ORM with FastAPI for async APIs. Celery handles background tasks like AI processing, media thumbnails, and embeddings.

The AI-assisted development angle:

Originally conceived as a collector platform, I reimagined this as an experiment: could one developer build a production-grade system in record time using AI-assisted development? The challenge: deliver a scalable backend with databases, search, and LLM integration, plus a modern frontend — offline PWA, Telegram bot, multi-language support, external authentication and more. Used Claude Code and Cursor extensively, establishing a Memory Bank documentation system to maintain architectural consistency. This proved that aggressive AI assistance, properly structured with clear patterns, Spec-driven Development and TDD, can compress months of solo development into weeks without sacrificing quality.

Tech Stack: Django + FastAPI; LangChain & LLM integration; PostgreSQL (pgvector + trigram); Celery + Redis; S3 storage; python-telegram-bot; React PWA (MobX, TypeScript, Vite, Shadcn/ui, Tailwind); Docker Compose; i18n

Tradusco, Open Source

github.com/mderk/tradusco

Machine translation tool for large text corpora — automates translation of thousands of strings into dozens of languages using LLM APIs. Used in production for game localization.

TECHNICAL SKILLS

Backend: Python, Django, FastAPI, Celery, RESTful API design and implementation, Asynchronous processing, websockets

Frontend: React, MobX, JavaScript and TypeScript, PIXI.JS, Spine (animations)

Databases: Deep SQL knowledge, Data modeling and optimization, PostgreSQL, MongoDB, Redis

AI/LLM: Prompt and context engineering, Langchain, LLM APIs and integrations, RAG, vector search, AI-assisted software development (Cursor, Claude Code, Github Copilot)

DevOps & Infrastructure: Linux, Docker, Kubernetes, GCP

Development Practices: Spec-driven development, Test-driven development, Clean maintainable code, Code reviews and refactoring, Testing (vitest, pytest)

EDUCATION

Saint Petersburg State University of Finance and Economics

Saint Petersburg, Russia — Finance and International Relations

LANGUAGES

Russian (Native) · English (Full professional proficiency) · Spanish (Elementary proficiency)