



Ihor Romanchuk

Solutions Architect & AI Engineer

12+ years · Kraków, Poland · remote with US & EU teams

email ihorr.romanchuk@gmail.com
web ihor-romanchuk.com
github github.com/ihor-romanchuk
linkedin in/ihor-romanchuk-487a97ba

01 / PROFILE

Solutions Architect and AI engineer with 12+ years designing scalable, secure cloud systems on AWS and leading the teams that build them. I take products from blank repo to production — LLM extraction pipelines, evaluation harnesses, cost-aware model routing, infrastructure as code, and the UI on top.

AWS Certified Solutions Architect – Associate

Toptal Verified Expert · Top 3%

M.Sc. Applied Mathematics & Informatics

12+ yrs building production software	4 months solo, first commit → production AI platform	1.5 mo → 3 d bug report to shipped fix, via AI automation	~10x faster page loads after re- architecture
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02 / EXPERIENCE

2026 – present
Remote

Solutions Architect Excedr, Inc. · Fintech, equipment leasing

Architected and single-handedly built an AI-powered underwriting platform — first commit to production launch in **4 months**.

- Designed an LLM document-extraction pipeline (LangGraph, OpenRouter, LangSmith) turning bank statements, balance sheets, P&Ls and cash-flow statements into structured, reviewable data.
- Built cost-aware model routing: each PDF is probed for text layer and page count — light Gemini models for simple files, vision models for scans, Claude as fallback.
- Created an AI evaluation harness with 70 human-verified golden fixtures across three suites in CI, plus 16 deterministic validity checks that flag AI errors before analysts approve data.
- Provisioned AWS with Terraform (ECS Fargate, RDS, SQS, S3, CloudFront, Cognito) across three environments; built the React 19 UI with source-highlighting PDF and spreadsheet viewers.
- Delivered a team-sized scope solo with AI coding agents governed by agent rules, 30 ADRs and a domain glossary — backed by 170+ automated test files.

Python · TypeScript · LangGraph · LangSmith · OpenRouter · Claude/OpenAI/Gemini APIs · React 19 · NestJS · PostgreSQL · AWS · Terraform

Jan – Jun 2026
Kraków, remote

Team Lead, Design System DriveNets · Networking

Led the Design System team (2 senior engineers) for a component library used by 100+ developers, and the organization's AI-adoption initiative for design-system work.

- Made the team AI-first (Claude Code, Cursor, Codex, Claude Design); codified 22 shared agent skills and built a design-system MCP server used by multiple internal teams.
- Built automations on Claude routines that triage and fix reported bugs — cutting bug-report-to-shipped-fix time from **1.5 months to 3 days**.
- Scaled the library from 34 to 67 components in 6 months (27 npm releases); added a 90% coverage CI gate and owned accessibility standards.

MCP · Claude Code · React 19 · TypeScript · Ark UI · Radix UI · Storybook · Turborepo · Vitest · Playwright

2026
Remote

Senior Full-stack Engineer / Solution Architecture Briefly · AI wealth-management CRM

Turned a stalled AI-generated prototype into a production-ready product and a working advisor demo.

- Built an LLM brief-generation pipeline (NestJS, OpenRouter, Langfuse) turning statements, notes and emails into an 8-section brief validated against a Zod schema.
- Designed a multi-tenant NestJS + Prisma + PostgreSQL API with Cognito-scoped tenant isolation on every query; full AWS stack as code in 8 Terraform modules.

Jun 2025 – Jan 2026 Remote (US)	Senior Front-End Engineer PCI Energy Solutions · Energy - Led the architectural modernization of the PCI Insights data-visualization platform: feature-oriented modules, CRA → Vite, strict end-to-end TypeScript. - Cut page load times ~10× with RTK Query caching, concurrent and selective querying, and HTTP cache-control. - Replaced Apache Superset with a client-owned visualization layer and multi-tab dashboards; wrote Node.js + Prisma migrations for historical data, removing licensing risk.
Oct 2023 – Mar 2025 Remote (US)	Technical Lead HubSpot · Enterprise SaaS - Promoted to Tech Lead; led a front-end team of 3 engineers through formation and established its workflows. - Built AI-driven back-end services in Java, designing prompt-engineering solutions and prompt-evaluation tooling. - Built the CCOM KPI dashboard front end from scratch — 300+ users in its first week.
Jul 2020 – Dec 2025 Remote (Canada)	Technical Lead — PharmaRockIT APS Compliance Consultants · Pharma - Architected PharmaRockIT, a secure multi-tenant pharmaceutical platform on AWS (admin panel, LIMS, electronic workbooks), and built the team of 5 behind it from scratch. - Built ASP.NET 8 serverless APIs on Lambda with PostgreSQL and Redis on RDS; reusable Terraform modules across repos; CI/CD on Azure DevOps. - Earlier, architected ALLEYE CMMS: ASP.NET Core + React + SQL Server on dockerized ECS, with audit trail, role-based auth and automated deploys.
2014 – 2024	Senior Software Developer · GeneDx · 2022–23 — led a 1.5-year migration of the HIPAA-compliant Provider Portal from AngularJS to React + TypeScript. Senior Full-stack Developer · CertifyOS · 2023–24 — reusable inline-editing data grid that halved redesign time; RTK Query codegen (~30% faster front-end work). Senior Full-stack Developer · Yara International · 2021 — crop-nutrition and CO ₂ /N emissions apps on GraphQL microservices (NestJS, AWS). Senior Full-stack Developer · e-Boks via Ciklum · 2019–20 — architecture for a new product; ~20 technical interviews. Full-stack Developer · JustAnswer via ABTO · 2016–19 — led a sub-project and a data-quality initiative; ran A/B experiments. Junior → Middle Full-stack Developer · Mechanic Advisor via ByteAnt · 2014–16 — SQL optimization took a page load from 30 s to 100 ms.

03 / SKILLS

AI & LLM systems	LangGraph, LangChain, agentic workflows · Claude, OpenAI, Gemini, OpenRouter · LangSmith, Langfuse · eval harnesses in CI · RAG, structured outputs, MCP
Architecture & cloud	Multi-tenant SaaS, serverless, event-driven · AWS (ECS/Fargate, Lambda, RDS, SQS, S3, CloudFront, Cognito) · Terraform · GitHub Actions, Docker
Back end	Node.js, NestJS, Prisma · C#, ASP.NET Core · Python · Java · PostgreSQL, SQL Server, Redis · REST, GraphQL
Front end	React 19, Next.js, TypeScript, Vite · RTK Query · Tailwind, shadcn/ui, Radix · design systems, accessibility
Leadership	Teams of 2–5 · hiring from scratch · mentoring · ADRs, technical design docs · stakeholder demos

04 / CERTIFICATIONS

AWS Certified Solutions Architect – Associate
Amazon Web Services · Dec 2025

AI Agents with LangChain and LangGraph · Udemy, 2026

Generative AI for Everyone; ChatGPT Prompt Engineering for Developers · DeepLearning.AI, 2025

05 / EDUCATION

M.Sc. Applied Mathematics & Informatics
Ivan Franko National University of Lviv · 2012–2018

Toptal Verified Expert in Engineering
Member since March 2020 · Top 3% talent