

dorin andrei drăgan

principal engineer

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professional summary

15+ years of building software that works. I break down problems, design clean systems, and write tested code. I don't chase tools, I use what solves the problem. Quality is the default. Docs matter. So does speed.

education

bachelor's degree: Computer Science Department, Technical University of Cluj Napoca

certifications

- Machine Learning Specialization — Coursera

skill set

languages: C#, .NET, ASP.NET, TypeScript, JavaScript, Python

infra as code: Ansible, Terraform, Vagrant

doc as code: VitePress, Pandoc, DocFX

ci/cd & monitoring: Azure Pipelines, GitHub Actions, Jenkins, Artifactory, Prometheus, Grafana, Jaeger, OpenTelemetry

containerization: Docker, Podman, Kubernetes

scripting: Bash, PowerShell

ai and ml: OpenAI, Anthropic, local LLMs, Retrieval-Augmented Generation, LangChain

web: ASP.NET, Angular, React, WebSockets, Express, FastAPI, Node.js

db: MSSQL, MySQL, MongoDB, ADO.NET, Entity Framework

management & vcs: Azure DevOps, GitHub, Bitbucket, Crucible, Git, JIRA, Confluence

tools: VSCode, GitHub Copilot, Neovim, tmux, i3, Visual Studio, ReSharper

selected projects

bidirectional api for ide backend migration

client: European manufacturer

duration: ~6 months

tech: ASP.NET, WebSockets, MediatR

Built a resilient API for realtime backend-frontend sync using WebSockets and JSON-RPC. Enabled seamless migration from a legacy WinForms UI to a Theia-based environment. Rewrote critical C++ crypto libraries in C#. Applied clean architecture and CQRS. No fluff, just fast, testable code.

product flows with apache nifi

client: European pharma and diagnostics company

duration: ~1 year

tech: Apache NiFi, PowerShell, JavaScript, XSLT, Python, Ansible, Docker, Prometheus, Grafana

Extracted complex product updates from SAP and piped them into internal systems. Used NiFi to build data flows with routing, filtering, and transformation logic. Set up IaC using Ansible and Python. Wrapped it all with monitoring, alerts, and documentation as code. Led both dev and ops.

smart card pki simulation with cli

client: European medical instruments manufacturer

duration: ~5 months

tech: .NET, PowerShell, Docker, Pandoc

Researched smart card technologies and built a PKI simulation from scratch. Delivered a PowerShell CLI compatible with PKCS #11. All wrapped in tests, CI pipelines, and exportable documentation. Owned delivery end to end.

statistical tooling for pre-market device approval

client: European pharma and diagnostics company

duration: ~2-3 years

tech: .NET Framework, WPF, WinForms, WCF, Entity Framework, PowerShell

Designed and implemented tooling to support regulatory validation of medical devices. The goal: ensure safety and efficacy before market release. Delivered components that integrated tightly with analysis workflows.

workflow simulation for device configuration

client: European pharma and diagnostics company

duration: ~4 years

tech: .NET, WPF, NUnit, Prism, LiquidXML, Log4Net, WiX

Developed a tool to help clients and marketing teams simulate real-world device usage. It analyzed output files, ran virtual workflows, and provided actionable insights. Supported sales, upgrades, and customer education. I led the system design and implementation.

mortgage management platform

client: Irish bank

duration: ~2 years

tech: .NET, web/windows services, ADO.NET, MSSQL

Built a rule-driven engine for mortgage screening and credit scoring. Integrated multiple external systems. Focused on reliability and transparency in every step of the evaluation process.