Andor Sípos

Founder, Technical Lead & Software Architect

.NET modernisation, system integration and custom business software | AI-assisted software development

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Focus: **Software architect**

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Profile

Software architect with 13+ years of experience building business .NET systems, who sets the structure of a solution and then helps build it. He reshapes large, long-lived codebases step by step into modular monoliths with Clean Architecture while they stay in production, and designs modules other products can reuse, such as an access-control module adopted by three of them. Scalability, compliance and maintainability drive his decisions on Azure.

Selected strengths

- **Modernisation without stopping production** — Reshapes large, tightly coupled .NET systems step by step into modular monoliths with Clean Architecture while they stay in production, most recently a .NET Framework, WCF and stored-procedure platform used by lenders and law firms.
- **Clean Architecture and modular design** — Starts new systems from a clean, modular design with clear module boundaries, and builds modules that other products can reuse, such as an access-control module adopted by three further products.
- **Technical leadership of small remote teams** — Designs the structure of the solution, coordinates developers, runs design and code reviews, mentors and onboards engineers, and acts as the primary technical contact for client stakeholders, most recently in a team that grew from 3 to 7–8 people.
- **AI-assisted software development** — Uses GitHub Copilot, Claude, Codex, ChatGPT and Cursor to support implementation, testing and documentation. Built an MCP server that supplies coding agents with codebase and project context. The development team remains responsible for technical decisions, code review and quality assurance.
- **Full-stack .NET and TypeScript/React delivery** — Delivers end to end with C#, ASP.NET Core, Entity Framework and SQL Server or PostgreSQL on the back end, TypeScript, React and MUI on the front end, and CI/CD through Azure DevOps or GitHub Actions to Azure, AWS and Kubernetes.
- **Root-cause debugging in long-lived codebases** — Investigates complex defects and escalated production issues in large, long-lived codebases, traces them back to their root cause, and pragmatically removes the technical debt and single points of failure behind them.

Professional experience

operandor sole proprietorship

August 2021 – present

Founder, Technical Lead & Software Architect · Remote

Helps reduce manual work through custom business software development, modernisation of existing .NET applications and system integration. Services also include taking over existing systems and providing senior developer capacity, and he takes on technical leadership within these engagements. He also builds AI-assisted automation for clients, for example to extract data from documents, organise enquiries and search internal information, with defined human review and approval steps. AI tools used during development support his own workflow; the resulting application does not need to include AI features. His own product, rovatix, supports document processing.

- Designs solution architectures, coordinates developers and takes part in implementation, code review and testing.
- Works remotely with clients' existing teams, agreeing tasks, availability and responsibilities before the work starts, and brings in experienced developers he has worked with before for larger pieces of work.
- Leads the development of rovatix, which reads data from PDFs, scanned documents and photos and, after a human check, passes it on in an agreed format; it is offered as a demo and an agreed pilot.

- Built operandor.io, a four-language website, with a Blazor WebAssembly front end on the operandor design system he designed, with light and dark themes and a responsive layout, and an Azure Functions API following Clean Architecture, tested with xUnit and deployed to Azure Static Web Apps through GitHub Actions.
- Worked on an experimental .NET MAUI project within operandor.

C#, .NET, ASP.NET Core, Entity Framework, LINQ, SQL Server, Azure, Azure Functions, Azure Static Web Apps, Azure DevOps, GitHub Actions, Git, Blazor, CSS, xUnit, Clean Architecture, Modular monolith, GitHub Copilot, Claude, Cursor, JavaScript, HTML, ChatGPT, Codex

CLIENT PROJECTS

Modernisation of a mortgage and property transaction platform – Lightbloom August 2025 – May 2026
Lead software engineer & architect

A business-critical platform supporting mortgage and property transactions for lenders and law firms. The multi-module enterprise system, built on .NET 10 and Clean Architecture, spanned at least six interconnected repositories and products. Worked on defining the architecture and technical direction and implementing gradual modernisation.

- Reshaped a tightly coupled .NET Framework system, built on WCF and stored procedures, step by step into modular monoliths on .NET 10 with Clean Architecture, CQRS and vertical slices, replacing the legacy WCF services with REST endpoints using the Strangler Fig pattern while the system stayed in production throughout.
- Delivered a reusable access-control module, later adopted by three of the client's other products, and a reporting module fed by Azure Data Factory; the two modules were then used to build a new product.
- Delivered an Azure Functions service that used Azure OpenAI to extract structured data from uploaded documents as JSON and persist it directly in the production database.
- Built an internal MCP server that lets AI coding agents retrieve relevant codebase and project context from work item descriptions, using lexical, domain-specific retrieval tuned to the project's terminology.
- Worked on integrating the Platform directory module across the platform and created reference implementations to guide consistent architecture.
- Introduced a testing framework built on xUnit and Playwright, covering the full testing pyramid, with unit, integration and end-to-end tests accompanying both the modernisation and new features.
- Drove the .NET upgrades, the CI/CD pipelines, the functional test infrastructure and comprehensive documentation.
- Reviewed all of the team's pull requests, owned design reviews, ran in-depth repository audits and defined technical standards across the platform.
- Mentored engineers and onboarded new joiners onto the large legacy codebase as the team grew from 3 to 7–8 people.
- Handled escalated production issues on the business-critical system, from investigation through root cause analysis to remediation.
- Introduced Claude Code across the team and built AI-assisted development workflows using Claude Code, GitHub Copilot and custom automation to support development across multiple repositories.
- Designed the Entity Framework data layer during the modernisation.

C#, .NET, ASP.NET Core, Razor Pages, WCF, SQL Server, T-SQL, Azure, Azure App Service, Azure Key Vault, Azure Functions, Azure OpenAI, Azure Data Factory, Azure DevOps, MCP, Clean Architecture, Modular monolith, CQRS, Vertical Slice Architecture, GitHub Copilot, Claude, Cursor, Mediator, MediatR, Carter, FastEndpoints, SOLID Design Principles, Dapper, Playwright, Entity Framework, ASP.NET MVC, Azure SQL, REST APIs, xUnit, Docker, JavaScript, HTML

Insurance agency management SaaS – Supercharge October 2024 – May 2025
Lead software engineer

Developed a SaaS product supporting insurance agency operations, including lead and sales opportunity management, communication with insurance carriers and accounting workflows.

- Built a feasibility demo of the product for a prospective enterprise client.

C#, .NET, WPF, SQL Server, Azure, Clean Architecture, Modular monolith, SOLID Design Principles, Entity Framework

Test reports for an accredited laboratory – Regatta Project Kft. February 2024 – May 2024
Software engineer

A .NET application that helped an accredited materials testing laboratory prepare its test records and reports.

- Worked as the sole developer on the project.
- Developed the test record features in .NET on a SQL Server database and built the printable test reports with DevExpress Reporting.
- Supported the laboratory in meeting its accreditation requirements with the finished application.

`.NET, DevExpress, DevExpress Reporting, SQL Server, Windows Forms`

Supplier reporting platform – AGCO Corporation
November 2022 – September 2024
Lead software engineer

Developed a supply-chain business intelligence system with dashboards displaying key performance indicators. The platform brought together supplier forecast confirmations and their impact on production. Led the software engineering team from initial design through deployment and worked on integrating the application's backend, frontend and data components.

- Owned technical delivery across back end, front end and deployment as lead software engineer of a distributed team of 3–4 people.
- Built and maintained the TypeScript/React/MUI front end consuming the BI dashboard's APIs, where leaders filtered figures by business unit, region and supplier and compared successive forecasts part by part.
- Worked on an ASP.NET Core monolith following Clean Architecture and designed the PostgreSQL star schema behind the reports, loaded with supplier data by AWS Lambda functions he wrote in Python.
- Owned CI/CD across Azure DevOps and GitHub Actions, with containerised deployment on Docker and Kubernetes.
- Provided technical guidance and code review for the engineering team across several time zones.
- Solved complex issues in the PostgreSQL database and fixed performance problems in the Entity Framework layer.

`C#, .NET, ASP.NET Core, REST APIs, PostgreSQL, TypeScript, React, MUI, AWS, AWS Lambda, Docker, Kubernetes, GitHub Actions, Azure DevOps, Clean Architecture, SOLID Design Principles, Entity Framework, Python`

Plugin-based eCommerce solution on nopCommerce
January 2022 – November 2022
Architect and lead developer

Designed and developed custom plugins for a nopCommerce-based eCommerce solution, extending its functionality to meet business requirements without modifying the core application's source code.

- Extended a large third-party .NET codebase through nopCommerce's plugin architecture, without forking it or changing the core application's source code.
- Defined the solution's plugin architecture, carried the nopCommerce version upgrade through together with the plugins, solved issues in the platform's internals and led the development of several nopCommerce-based solutions.

`C#, .NET, ASP.NET, SQL Server, HTML, JavaScript, nopCommerce, Entity Framework`

Automated UI test suite
November 2021 – December 2021
UI test automation developer

Developed automated UI tests for a German gambling company's website to verify user-facing functionality and help detect regressions.

- Designed the structure of the automated UI test suite and used it to check the website's user-facing functionality and behaviour after changes.

`.NET, C#, xUnit, NUnit, Selenium`

Service management system
September 2021 – November 2021
Lead developer responsible for the whole system

Developed a service management system supporting the business workflow from initial quotations through service delivery and after-sales administration, tailored to the client's operational processes.

- Fitted the application to how the client operated, supporting the process from the quote to the paperwork after the service work.

`JavaScript, Node.js, Knockout, jQuery, SQL Server, C#, .NET, Azure, Apache Cordova`

ALLWIN Informatika Kft.

March 2015 – August 2021

Software Engineer · Budapest

Developed business applications, ship navigation software and image annotation tools for enterprise, public-sector and research and development projects.

- Worked on the Intelligent Image Object Annotator R&D project, ship navigation software, a public-sector business application, and an enterprise performance and permission management system. The associated project entries detail the tasks and technologies for each project.

`C#, .NET, ASP.NET MVC, Entity Framework, WPF, SQL Server, JavaScript, jQuery, Azure, Microservices`

> CLIENT PROJECTS
>
> #### Government business application
>
> Multi-layer business application for the public sector.
>
> `C#, .NET, Entity Framework, WPF, ASP.NET, HTML, JavaScript, jQuery, SQL Server, Razor Pages`
>
> #### Ship navigation and vessel tracking software
>
> Ship navigation and vessel tracking software for an international client.
>
> `C#, .NET, Entity Framework, WPF, ASP.NET, SQL Server, Telerik UI, ArcGIS`
>
> #### Intelligent Image Object Annotator
>
> R&D project from a winning tender: a tool for annotating objects in images.
>
> `C#, .NET, Python, Jupyter, CNTK, Azure, Docker, Kubernetes`
>
> #### Performance and permission management system
>
> Performance and permission management system for a large enterprise.
>
> `C#, .NET, ASP.NET, JavaScript, jQuery, SQL Server, SharePoint`

Grape Solutions Kft.

July 2014 – February 2015

Junior .NET Developer · Budapest

- Developed a hospital BI system and an associated portal for data visualisation and system administration in line with Hungarian requirements; built MOLAP cubes and defined key performance indicators (KPIs).
- Developed an internal portal for an international pharmaceutical company to manage active substances.
- Developed a website for an international hunting association to record hunting data.

`C#, .NET, ASP.NET MVC, SQL Server, Entity Framework, Kendo UI, Excel Power Pivot`

Regatta Project Kft.

April 2013 – July 2014

.NET Developer

Developed multi-layer business applications using .NET, DevExpress user interface components and a SQL Server database.

- Developed multi-layered manufacturing tracking software for a ceramics manufacturer.
- Developed bespoke multi-layered ERP and stock management software for an international quality assurance company.

`C#, .NET, Windows Forms, DevExpress, SQL Server, Entity Framework`

Technologies and competences

■■■■■ Expert – led architecture, standards or migrations with it
■■■■□ Advanced – designed solutions with it, reviewed code, solved complex issues
■■■□□ Independent – built production features with it independently
■■□□□ Working knowledge – worked with it in existing code
■□□□□ Familiar – used it in experiments or practice projects

The level shows how deeply Andor has worked with each technology in the documented positions and projects.

.NET platform

.NET	■■■■■ Expert	C#	■■■■■ Expert
ASP.NET Core	■■■■■ Expert	Entity Framework	■■■■□ Advanced
LINQ	■■■■□ Advanced	WCF (last used 2026)	■■■■□ Advanced

ASP.NET MVC (last used 2026)	Advanced	WPF (last used 2025)	Independent
Razor Pages (last used 2026)	Independent	Blazor	Independent
Windows Forms (last used 2024)	Independent	.NET MAUI (last used 2026)	Working knowledge

Architecture & practices

Clean Architecture	Expert	Modular monolith	Expert
REST APIs (last used 2026)	Expert	Vertical Slice Architecture (last used 2026)	Expert
CQRS (last used 2026)	Advanced	Microservices (last used 2021)	Working knowledge

Cloud & platforms

nopCommerce (last used 2022)	Expert	Azure	Advanced
Azure Functions	Independent	Azure App Service (last used 2026)	Independent
Azure Static Web Apps	Independent	Azure Key Vault (last used 2026)	Independent
AWS (last used 2024)	Independent	SharePoint (last used 2015)	Working knowledge
Azure Data Factory (last used 2026)	Working knowledge	Azure Service Bus (last used 2025)	Familiar

Databases & data access

SQL Server	Advanced	T-SQL (last used 2026)	Advanced
PostgreSQL (last used 2024)	Advanced	Azure SQL (last used 2026)	Independent
Dapper (last used 2026)	Independent		

Leadership

Technical leadership	Expert	Code review	Expert
Mentoring (last used 2026)	Advanced		

DevOps, CI/CD & testing

xUnit	Expert	Azure DevOps	Advanced
GitHub Actions	Advanced	Git	Advanced
Docker (last used 2026)	Advanced	Playwright (last used 2026)	Advanced
Selenium (last used 2021)	Advanced	NUnit (last used 2021)	Independent
Kubernetes (last used 2024)	Working knowledge		

AI-assisted development

Claude	Expert	GitHub Copilot	Advanced
Codex	Advanced	ChatGPT	Independent
Cursor	Working knowledge		

AI integration and automation

Azure OpenAI (last used 2025)	Independent	MCP (last used 2026)	Independent

Front end & UI libraries

HTML	Advanced	CSS	Advanced
DevExpress (last used 2024)	Advanced	JavaScript	Independent
jQuery (last used 2021)	Independent	React (last used 2024)	Independent
TypeScript (last used 2024)	Independent	MUI (last used 2024)	Independent
Telerik UI (last used 2019)	Independent	Kendo UI (last used 2017)	Working knowledge

Other languages & runtimes

Node.js (last used 2021)	Working knowledge	Python (last used 2024)	Working knowledge

Education, certification and training

BSc (Applied), Electrical and Computer Engineering — Subotica Tech – College of Applied Sciences 2008 – 2011
Grade: 8.11/10 · Courses: Databases, Web development, .NET

Summer school, Advanced C# and XNA game development — ELTE Summer University / Microsoft Summer School 2011

Summer school, Web development: Silverlight, ASP.NET, SQL Server — Microsoft Summer School 2010

Secondary education, Horticultural technician — Beszédes József MMIK, Kanjiža (Serbia) 2003 – 2007

Certificates and training

- Programming in C# (exam 70-483) — Microsoft
- DAT236x: Deep Learning Explained — edX 2017

Awards and competitions

- **2nd place, CEE IoT Hackathon Hungary** — CEE IoT Hackathon Hungary. As a member of Team ALLWIN. 2016
- **National finals, Imagine Cup 2012** — Microsoft. Plant recognition system. 2012
- **Creativity award and Nuance-Recognita Zrt. special prize** — Óbuda University, 37th Scientific Students' Conference (TDK) 2012

Publications

- **Microsoft Windows 7 Pontról pontra** — Perfact. Created illustrations for the book. August 2011

Volunteering

- **Flood Defence Volunteer**. Participated as a volunteer in flood defence efforts in Budapest during the 2013 Danube flood. June 2013

Languages

- **Hungarian** — Native
- **English** — Fluent, professional working proficiency
- **Serbian** — Limited working proficiency
- **Croatian** — Limited working proficiency