



Daniel Chatzopoulos

"Instinct is something which transcends knowledge"
Nikola Tesla

System- & Software Architect – Development Lead – Software Magician

Profile and Skills

More than 15 years of software development in different areas of responsibility and technology stacks have taught me how different approaches need to be to achieve the desired results. Sometimes my solid theoretical and practical education during my computer science studies serves me well, sometimes a proven standard pattern is the right way to go, and sometimes it is simply a matter of experience and the intuition acquired through it, to find the solution to a problem. In the end, however, it always comes down to people. Working as a team on a project or even on a vision and involving everyone in such a way that they can contribute their best to the joint success is the real secret and challenge. Working with customers and product managers to shape their wishes, ideas and visions, to challenge them and to let the best eventually become reality in software, that is my passion. But also, away from the computer, I like to create new things and work on car restoration or DIY projects for myself, my family, or my friends. There is always something to do and standing still is alien to me.

C#, .Net-Framework 3.5 to .NET 7 (+15 years)

Microsoft SQL Server, EntityFramework / EF Core (+8 years)

Distributed Systems, WCF, SignalR, MQTT, RabbitMQ (+10 years)

Unit Testing, RhinoMocks, Nunit (+15 years)

CI/CD, Jenkins, Azure (+8 years)

Architecture & Documentation, Enterprise Architect, Jira & Confluence, Microsoft Boards & Wiki (+12 years)

Frontend Development, Angular, Razor Pages (+2 years)

Abstract thinking and problem solving (+25 years)

.NET, .NET Core, .NET Framework, Android-SDK, Angular, AOP, Arduino, ASP.MVC, ASP.NET, ASP.NET Core, Azure-App-Services, Azure-Cloud-Service, Azure-DevOps, Azure-IoT-Hub, Azure-SQL, C#, C++, MATLAB, EF.Core, Entity Framework, EPPlus, Jenkins, LINQ, MFC, MS-Access, MySQL, NUnit, OpenCL, OpenLayers3, OpenStreetMap, P/Invoke, PLINQ, RaspberryPi, RhinoMocks, Roslyn, SignalR, Silverlight, SQL-Server, SMTP, Thrift, T-SQL, UML, VB 6, VBA, VB.NET, WCF, Win32, Windows Phone, Windows Workflow Foundation, WPF, Xamarin, XML, XAML

Languages

- German: native language
- English: fluent in negotiation
- Greek: basic knowledge

Curriculum vitae and career steps

2021-01 - today – Co-Founder & Director technology

DrySoc – Co-Founder

While pursuing an employee career in software development for the automotive industry, thoughts and discussions with colleagues and friends about "how we would do it in our own company" arose regularly. In 2021, the time had come and the new company DrySoc (as an acronym from our most important software development principles DRY = don't repeat yourself and SOC = separation of concerns) was founded. Because the trend towards digitalization and cloudification is accelerating, qualified and experienced professionals are in high demand, so several projects were quickly acquired and the need for expansion was there. In 2021 and 2022, I fulfilled the roles of overall development manager of C# and web development in FEV STS GmbH and as DrySoc GmbH shareholder in parallel. Since mid 2022, I have dedicated 100% of my energy and focus to DrySoc GmbH and our projects. For my person the current steps are focused on senior developer and architect positions as a freelancer while the DrySoc product vision progresses.

- Consulting for system and software architectures
- Full-Stack-development with C#-Backends
- Agile Software-Development on basis of Azure DevOps

C#, .NET 7, EF Core, Azure, Angular, Razor Pages, SQL, GIT

2017-10 - 2022-06 – Overall development manager

FEV – Lead Architect and Mentor

FEV builds and operates complete test facilities for automotive OEMs and TIER1 suppliers, for testing engines, batteries, fuel cells and the like. In the context of Industry 4.0, the efficient (preferably fully automated) operation of test fields is the top priority. For this purpose, various hardware and software products are developed at FEV STS GmbH.

In addition to the continuous development of the data evaluation platform TOPEXPERT, various customer-specific development projects, both for web and desktop, were carried out in parallel. My responsibility as overall development manager was, among other things, the conceptual design of these systems and preparation of proposals. Technical design, cost estimation or technology studies were part of my daily tasks as well as the identification of the necessary qualifications for the projects. In coordination with the department management and the internationally positioned product management, technical and personnel roadmaps were derived and followed up by me in terms of content, as well as financially in SAP.

Once the projects were won and in progress, my responsibilities included being continuously available as a system architect and mentor to ensure that established standards and thus development quality could be delivered, by overseeing development activities from an overall perspective. In this context, training and guiding colleagues, as well as regularly implementing difficult components, were my responsibilities. In total, there were on average 5 parallel projects and products with >20 employees in technical responsibility of my position.

- Technology road mapping
- Employee development and training
- System- and software-architecture
- Full-Stack development

C#, NUnit, RhinoMocks, Entity Framework, MSSQL, Windows Forms, Jenkins, WCF, Workflow Foundation, WPF, JIRA & Confluence, SVN, Git, SAP

2014-04 – 2022-06 – Team leader

FEV – Team leader C#-Development

After about 2 years of being responsible for one of the calibration products, I was given the leadership of the entire C# development and thus the technical responsibility for the entire TOPEXPERT product group. This included about 15 developers working on three products. Together with the technically responsible senior developers, we developed a uniform architectural solution right from the start, the further long-term design of which now became my responsibility. The architecture was fundamentally designed in such a way that it could be developed into the three core products by pure configuration. It was also possible to provide special solutions on this basis in a very short time.

In addition to the technical responsibility, the long-term capacity and roadmap planning in coordination with the department management, the observation and selection of suitable technologies, the planning, coordination and monitoring of all development work as well as the capacitive growth strategy of the team were part of my area of responsibility. In this phase of the department transformation, increased focus was placed on Continuous Delivery and DevOps, and implemented by me, setting up a corresponding system for the overall department.

- Team lead and employee development
- Technology road mapping
- System architecture and DevOps development

C#, NUnit, RhinoMocks, Entity Framework, MSSQL, Windows Forms, Jenkins, WCF, Workflow Foundation, WPF, JIRA & Confluence, SVN, SAP

2012-03 – 2022-06 – Technical project lead

FEV – Technical project lead FACE-Data evaluation platform

In parallel to the transmission tool development project that was won, the product managers of FEV's methods department worked together on the shared division to develop a new internal product strategy that envisioned a complete realignment. Previously offered individual tools, each driven by a single developer for a specific task, should be transitioned into a common framework for three calibration products (data evaluation, vehicle test automation, and design of experiment). I was given technical responsibility for the data evaluation product FACE (Framework for Automated Calibration and Evaluation), which was the cornerstone of the new architecture.

Here I took over the leadership of a team of 5 developers with all related responsibilities, for example requirements analysis with the product managers and key users, concept development, technical implementation, staff development and process design. In connection with this new product strategy, the implementation and auditability of the CMMI process model together with an agile development approach was strengthened and required some new basic concepts, which had not been established in sufficient depth until then. Thus, I mainly pushed the conversion of the architecture to a service-based approach, as well as the strengthening of unit and integration testing and clean code development. This buildup of a foundation for a common concept was the basis for a product and tool portfolio that has evolved to this day.

- Agile management and requirements management
- System architecture
- Implementation in C#

C#, NUnit, RhinoMocks, Entity Framework, MSSQL, Windows Forms, Jenkins, WCF, Workflow Foundation, WPF, Enterprise Architect, SVN

2010-09 - 2012-02 – Student assistant worker

FEV C#-Software developer

After completing the internship, I was recruited by FEV as a student assistant to continue to support the development of the TraCE project. A generic plotting framework for the encapsulation of 3rd party graphics libraries and the visualization of all domain-specific data objects was designed and implemented as a key step. In addition, the range of modules for interaction with external application systems (especially ACI and MCD3) has been further developed and expanded with a new concept for data transmission. Step by step, I took on more technical responsibility in the project, which manifested itself in the implementation of additional core modules, such as a workflow module based on Windows Workflow Foundation and creation of the foundation for a generic data service concept.

- Requirement management with calibration specialists and product owners
- Development in C#
- Unit- and integration-testing

C#, NUnit, RhinoMocks, Microsoft Visual Studio, Enterprise Architect, SVN

2010-09 - 2011-03 – Internship

FEV C#-Software development

In preparation for a multi-year, multi-million-dollar contract, FEV's end customer PSA, conducted a 1.5-year competitive pre-qualification project. Two vendors had to demonstrate their competencies in transmission calibration methodology. One aspect of this evaluation was the availability and efficiency of suitable software tools. In this context, FEV developed the so-called Transmission Calibration Expert (TraCE) product, an expert tool for transmission calibration. I implemented various new modules and components and drove the fundamental restructuring of the software architecture. Among others, I realized the modules of the so-called ShiftAnalyzer (a graphical visualization of shift characteristics for the calibration of a vehicle's shift strategy), a general component for the visualization and transaction-correct processing of all calibration elements (the component was later integrated into the entire application), as well as "FEVos" as a model-driven system for the objective evaluation and visualization of shift processes, with associated remote control of external application systems.

- Requirements management with calibration specialists and product owners
- Development in C#
- Unit- and integration-testing as well as validation in the vehicle

C#, NUnit, RhinoMocks, Microsoft Visual Studio, SVN

2008-2010 – Student assistant worker

Institute for medical psychology University Hospital RWTH Aachen

As a student assistant I was responsible for the support and further development of the ExFuNet system, a series of experiments for fMRI-based optical feedback analysis. I implemented several new modules and functionalities in C++. For example, a new tool for automatic generation of input data for ExFuNet as well as a tool ("A-DESC") for adaptive depression screening based on the "partial credit model". In contrast to the usual paper questionnaire with 60 questions, this was a self-adaptive system that selected the next questions based on statistical methods until the threshold for possible information gain was undercut. This methodology enabled a clear diagnosis after about 5-6 questions. In parallel to the development activities, I supervised a series of experiments on fMRI-supported word-finding analysis.

- Requirements analysis
- Implementation and development in C++

C++, MATLAB