

## Extended Skill Matrix

Skill	Since	Description
C#	2003	Very high level of proficiency. Experienced in performance and memory optimizations, object-oriented design, low-level and dumb-debugging, PSSCOR, CDB, SOS, WinDBG. I'm writing advanced applications with multithreading, messages, events, high-performance, large data sets and hardware interaction <a href="#">Certified</a>
HTML, CSS, JavaScript	1996	Interactive, user-friendly, fast, graphic, intelligent websites. I am creating web components with latest, standard technology.
Canvas, SVG, JS Graphics Libraries	2012	I am using these for highly interactive graphics, geographical maps, statistics.
WebAPI, WebSockets, REST	2012	Base of my current web application developments. Did not use gRPC, yet, but am highly interested. I'm VERY experienced in all kinds of distributed systems, micro services and interprocess communication, can create and read network traces, like with WireShark.
ASP.NET, WebForms, Telerik, DevExpress	2005	I've been using these in many projects and for many years, including various control libraries. I'm VERY experienced in refactoring legacy ASP.NET applications! In a current project we step-by-step replace old pages with modern technology, improving structure, stability and performance. <a href="#">Certified</a> .
SQL, ORM, DBMS, RDBMS	1989	Microsoft, Oracle, Informix, SQLite, Firebird, ... I started my development career in a database development company (ADImens, Karlsruhe). I've used various databases and their toolsets and wrote PL/SQL stored procedures. I've created an ORM.
T-SQL, Microsoft SQL Server	1997	These are part of my daily work. I'm writing stored procedure and doing performance optimizations, tables and index design, backups and installations. <a href="#">Certified</a>
Microsoft.NET, .NET core, .NET 5.0	2003	These are basis of my daily work. I am very experienced and did all kinds of optimizations, consulting, troubleshooting, debugging with this system. <a href="#">Certified</a> I used Entity Framework, LINQ in various projects.
WinForms, WPF, XAML	2003	I'm an WindowsForms expert, drawing from extensive WinAPI, Win32, GDI knowledge. I gave courses in WPF, but then switched to web technology.
Microsoft DevOps, CI/CD, TFS, Git, GitLab	1989	Also GitHub, Tortoise, SourceSafe, ClearCase, ... Using Source Control Systems has been part of my daily work for many years. As Team Lead, I have been responsible for versioning and reviews. I'm currently administrator of two DevOps instances.
MVC, Razor, Razor Pages, Blazor	2012	Blazor since 2020. With Blazor, I implemented interactive, graphical web controls.
OOP, DDD, Patterns, SOLID, UML, DFD	1987	First contact in 1987 with SmallTalk. Using it in C++ since 1989. Fluent and advanced knowledge. Many times, I coached or trained others on how to use these. Diploma thesis with and about Tom DeMarco method. Experience with UML drawing and DFD. Fan of data-driven design, data-flow analysis. I am an experienced requirements analyst.
MVC, MVVM, MVP, ... Patterns	2007	Besides using these patterns regularly, I've even been studying them in university courses: "CSCW: Computer Supported Cooperative Work", "CSCL: Computer Supported Cooperative Learning", Prof. Haake, University Hagen

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UX, UI, graphics design, image processing	1984	Since forever, I'm creating user-interface designs. I'm no bad graphics designer, usually drawing and designing all of the application graphics. I'm experienced in image handling and processing.
TDD, Unit Testing, GUI Testing	1997	I've been using various means of testing and unit testing throughout my career. I wrote a distributed testing framework with C++ for Siemens Medical SynGo.
Visual Studio	1997	Always using latest version.
WCF, SOAP, WSDL, XSD, XML WebServices, Remoting	2006	While working for Microsoft Distributed Services, I was responsible for these technologies. <a href="#">Certified</a>
C/C++	1989	Formerly very good knowledge. I developed sophisticated applications with these languages. Often I also was responsible for troubleshooting and debugging.
ERP, CRM	2015	With colleagues, I'm working on a company-specific ERP/CRM system. The system covers typing office and product calculation ( bill-of-material, assemblies, calculation ) with a very interactive, modern webpages as capable as MS-Word or like a hierarchic Excel. <a href="#">EVV</a>
Email, Exchange, Outlook	1989	Based on MS-Exchange, Outlook and internet-technologies, I developed and introduced sophisticated applications. They included response monitoring, automatic CRM protocols, scanning, OCR and automatic classification.
Windows, Win32 API, Admin, Linux, Unix, DOS	1984	I have been using DOS and Windows since the beginnings. So I've accumulated lots of API and administrative knowledge. I used to do advanced Windows API programming with C and C++, using MFC and other frameworks. You might have a look at my <a href="#">Projects</a> page for some examples. I have deep knowledge of Windows Security ( ACL, ActiveDirectory (AD), Authorization, Authentication, Cerberos, ...).
VB.NET	1997	Also VBA and other BASIC dialects. I used these languages in many projects and for scripting.
Speech Input	2005	Voice input with various technologies, especially Nuance Dragon® Naturally Speaking. Dictation functions in MS Word and other applications, Accessibility, program control, Programming by and with voice input, Configuration of vocabulary, text modules and macro programming. More about this source text Source text required for additional translation information Send feedback Side panels
Various	1984	Speech Input, Generics, Generators, Parallelism, Porting, OCR, Rapid Prototyping, Decoupling, Reengineering, Microsoft Office, Hardware-Control (IVR, balances, burettes), ...
Study	1988	Wirtschaftsinformatik at Fachhochschule Karlsruhe (Informatik, Mathematik und Betriebswirtschaft) Title: Diplom-Informatiker (Dipl.Inform. FH).
Bank	1982	IHK-certified bank clerk: Kreissparkasse Frankenberg. For HypoVereinsbank (and others) I analyzed business requirements in close collaboration with the business departments and developed applications, like <a href="#">POET-EA</a> .
German	Native	Very good, written and spoken.
English	Fluent	I am fluent (C2) regarding technical topics and computer science. I've been working with clients worldwide, writing specifications and documentation, giving presentations and coaching.

Skill	Since	Description
Spanish	Good	I am fluent in day-to-day interactions, but grammar, vocabulary and pronunciation still need some work.