

## Skills Self-Assessment

### Languages

C# ☆☆☆☆☆	15+ yr exp.	<i>Current</i> Have developed and deployed countless applications. Teach C# (basic and advanced) in local college, at local user groups and tech conferences.
VB.NET ☆☆☆☆	5+	<i>Current</i> Have developed smaller applications. Able to move fluidly between C# and VB.NET. Teach VB.NET in local college.
VB v6 ☆☆☆☆☆	25+	<i>Expert, but not current</i> Have developed major (10,000s LOC) in modular data processing and real-time applications.
VBA ☆☆☆☆☆	20+	<i>Current</i> Have developed complex Access, Excel, and Visio solutions (10,000s of LOC) including DB access, programmatic analytics and simulation.
C++ ☆		Have developed data processing applications in past, also developed drivers for the Psion handheld data acquisition computer.
Python ☆☆		Have developed simple Python applications. Have passed the Hacker Test for Python. Competent to develop in VS Code. Teach Python basics to local user groups and tech conferences. No deployed applications.
R ☆		Teach R basics to local user groups and tech conferences.
Java		No commercial projects. Teach basic Java in local college.
Clipper ☆☆☆☆☆	30+	<i>Expert, but not current</i> Developed and deployed 100,000s LOC in DOS-level applications. Integrated with Crystal Reports through custom Crystal Windows driver.
Crystal Reports ☆☆☆☆	25+	<i>Expert, but not current</i> Have developed 100s of reports including many sub-reports and multi-database connectivity. Have developed DOS to Clipper application to interface Clipper applications.
Turbo Pascal ☆☆☆☆		<i>Expert, but not current (defunct language)</i> Implemented operations management application.
8085 / Z-80 ☆☆☆☆		<i>Not recently used</i> Developed computer systems and processing devices based on the Intel 8080 architecture.
68000 ☆☆☆☆		<i>Not recently used</i> Developed handheld data logger based on the Motorola architecture.

## Microsoft SharePoint / Power Platform

Power BI ☆☆☆☆	2 yr exp.	Developed financial and engineering reports – SQL, XLS, Azure DevOps
Power Platform ☆☆☆	1	Developing mobile and browser-based applications integrating with SQL.
SharePoint ☆☆☆	10+	Developed SharePoint based Kanban system, document repository, and applications dictionary

## Azure Applications

Function Apps ☆☆☆☆	2+ yr exp.	Developed multiple Azure Function App solutions to perform specific automated tasks – timer based, event based – API data exchange, data processing.
Azure Services ☆☆☆	2+	Utilized Azure Key Vault, Azure Service Bus

## Database

SQL ☆☆☆☆☆	20+ yr exp.	Developed databases serving 10's of millions of rows, developed stored procedures addressing CRUD and advanced analysis, views and functions addressing simple and complex interactions. Avoid cursors, but have used them. Competent with sub-queries, SQL Bulk Load, CTE. Have written and proposed corporate development standards. Teach C# at local user groups and tech conferences.
SQL Admin ☆☆☆	20+	Have performed basics of SQL Admin (users, schemas, linking, backup and restore). Database administrators have addressed more complex operations.
Azure SQL ☆☆☆	3+	Developed production data schema and data flow philosophy.
Azure tables ☆		Have an academic and experimental knowledge of Azure Tables and Storage.

## Machine Learning

Azure ML Studio ☆☆☆	3 yr exp.	Have developed demonstrations and experiments. Teach ML Studio at user groups and tech conferences.
Cognitive Services ☆☆	2	Have developed demonstrations. Teach ML Studio at user groups and tech conferences.
ML.NET ☆☆	2	Have developed demonstrations based on ML Studio experiments. Teach ML Studio at user groups and tech conferences.
Data science ☆☆☆	4	Developed data science demonstration projects utilizing Azure ML Studio, Azure Cognitive Services, and ML.NET.

## Platforms and Extensions

Visual Studio ☆☆☆☆	15+ yr exp.	<i>Current through 2022</i> Have utilized Visual Studio since early versions. Competent integrating NuGet and Git. Have not developed extensions.
VS Code ☆☆☆	2+	Utilized VS Code for Python, R, and C# projects
Git / GitHub ☆☆	3+	Utilize basic Git features for personal, professional, and educational purposes.
Azure ☆☆	7+	Have utilized and developed services including VM, functions, storage, web application, databases, machine learning, cognitive services.
ReSharper ☆☆☆☆	10+	Proficient with ReSharper for several years. More to learn.
RedGate Toolkit ☆☆	10+	Utilize SQL Toolkit for database deployments, database documentation, schema maintenance, configuration replication

## Frameworks

.NET Framework ☆☆☆☆☆	15+ yr exp.	<i>Current through v4.7.2</i> Have utilized .NET Framework since early days. Have developed applications, libraries, and unit test projects (including WinForms and WPF solutions).
.NET Core ☆☆☆☆☆	3+	<i>Current through v6</i> Have developed applications, libraries, and unit test projects (including WPF solutions).
WinForms ☆☆☆☆☆	20+	Have developed multiple stand-alone and client-side applications including forms inheritance, MDI, User Controls. Projects include desktop analytics, real-time processing, data ingestion.
WPF ☆☆	3+	Have developed and deployed solutions. Not yet as proficient as WinForms..
WebForms ☆☆	15+	<i>Not recently used</i> Have developed 2 commercial webforms products with an estimated total time in service of 15 years. Have taught WebForms at local college.
Entity Framework ☆☆☆☆	8	Have developed and deployed complex, applications and analytics utilizing EF 4-6.
Reverse POCO ☆☆☆	5	Have implemented production systems based on database-first reverse POCO pattern.
Dapper ☆☆☆	5	Have implemented production systems based on database-first Dapper.
Component One ☆☆☆	10+	<i>Current through 2009</i> Developed and deployed multiple projects integrating real-time processing and data analytics
Telerik WinForms ☆☆☆☆	8	<i>Current through 2018</i> Developed and deployed multiple projects integrating data analytics

## Development Methodologies

Coding Standards ☆☆☆☆☆	10+ yr exp.	Have developed and implemented corporate standards. Teach concepts at local college, local user groups and tech conferences.
Agile ☆☆☆	8	Have implemented and managed Agile projects with 3 <sup>rd</sup> party suppliers.
Kanban ☆☆☆☆	10+	Early adopter of principals. Implemented and managed Kanban processes in corporate environment.
Azure DevOps ☆☆	2	Have utilized and develop projects around Azure DevOps solutions.
Unit Testing ☆☆☆☆☆	10+	Implement unit and integration testing in all development projects. NUnit and Shouldly normally utilized. Teach unit testing at local college, local user groups and tech conferences.
Multi-Threading ☆☆☆	15+	Have developed task-based threading applications as well as modern async / await applications. Teach basic multithreading in local college
CQRS ☆☆☆☆☆	10+	Have been practicing CQRS design patterns for years. Implemented and deployed as part of multi-tier and WCF projects.

## Other

Technical writing ☆☆☆☆☆	40+ yr exp.	Have developed and delivered proposals, project plans, user manuals, technical manuals, service manuals, specifications, and college lab manuals. Skills developed through university training: Technical Writing, Technical Editing.
Algorithms ☆☆☆☆☆	40+	Have been active data analytics and processing developer utilizing advance algorithmic solutions. Have developed industrial processing algorithms for inspection systems and commercial algorithms for VBA and Access solutions. Solutions developed in VB6, C#, SQL.
Data Analysis ☆☆☆☆☆	30+	Have developed data analytics over course of several years addressing real-time, census projections, educational success.