



TOM MCCOID

.NET Architect / Database Developer

San Diego, CA

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Microsoft Platform .NET / C# Visual Studio 2022	Windows Server 2019 Windows Services WCF	SQL Server 2019 T-SQL Entity Framework	IIS 10 MVC / ASP.NET Web Services	Javascript / jQuery AJAX CSS / Bootstrap
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I am a seasoned Microsoft-platform developer with over 20 years of design and programming experience. My core competencies are C#, the .NET Framework, T-SQL, Entity Framework, LINQ, and Javascript. I have been employed in a diverse set of industries, and have worked with a broad set of back-end and client technologies. I strive to program code that is compact, modular, performant, and reliable.

AquaSpy, Inc	San Diego, CA	(10/12 - 12/22)	Architect / Developer
[C#, Windows Services, WCF, MVC/ASP.NET, VS 2022, SQL Server 2019, Entity Framework, Xamarin Forms]			

- Served as architect/lead developer of a multi-tier software system in support of the primary company product, AgSpy, a subscription-based SAAS solution for agricultural growers to monitor soil and crop conditions (moisture, electroconductivity, root penetration)
- Led a comprehensive redesign effort of the original AgSpy system across all tiers (database, services, web applications), devising the conversion plan, programming a utility application for data migration to the revised database, and performing the conversion
- Designed and programmed multiple Windows services (soil probe data receipt and processing, scheduled data analysis, scheduled email notifications), the customer-facing web application (AgSpy), an internal administrative web application (sales, finance, shipping, subscription management, technical support), and various internal utility applications
- Implemented algorithms based on mathematical models pertaining to the detection of irrigation events, "full point" (soil moisture capacity) estimation, root depth detection, and other analytics
- Incorporated several 3rd-party APIs in support of company operations including shipping (UPS), payment processing (PayPal, Stripe), mapping (Google), and various ag-related services (John Deere, openweathermap.org, Bureau of Land Management)
- Developed a basic ecommerce website for direct-to-consumer sales of CropHesay, an exception-oriented soil monitoring service based on the AgSpy system
- Maintained a mobile app (Android, iOS) developed using Xamarin Forms
- Performed basic server, database, and internal network administration tasks, including disaster recovery planning and server migrations
- Provided routine technical support to internal personnel, company partners, and customers

Tax Compliance, Inc	San Diego, CA	(10/10 - 03/12)	Senior Developer
[Windows Forms (.NET 3.5/4.0), WPF, WCF, C#, CSLA, VS 2010, SQL Server 2008]			

- Assisted in the continued development of a feature-rich commercial property tax management application (PTMS), performing programming tasks within each of the major functional layers of the system (user-interface, entity implementation, client-side logic, transport, service logic, data access, database procedures)
- Programmed customer-specific plug-ins for the main application

PhotoLynx, Inc	Julian, CA	(01/09 - 12/09)	Architect / Developer
[WPF (.NET 3.5), C#, VS 2008, SQL Server CE 3.5, LINQ-to-SQL]			

- Served as architect and lead developer for a WPF-platform photography management application utilizing SQL Server 3.5 CE databases for application/project data storage and LINQ-to-SQL for data representation and access
- Developed a hybrid system (LINQ-to-SQL and ADO.NET) for the representation and UI display of data pertaining to custom (user-defined) fields
- Developed processes for archiving and transferring application data between application installations
- Developed process for seamless execution of database schema updates to existing application installations

Rose Line Solutions	Oceanside, CA	(10/07 - 12/08)	Senior Developer
[Windows Forms (.NET 2.0), C#, VS 2008, SQL Server 2005]			

Part-time contract; overlapped with LPL

- Developed Windows Forms (.NET 2.0) application for testing embedded code on various electronic hardware devices, including a series of custom controls for accessing hardware registers and forms for managing user-defined register arrangements
- Designed the database schema and developed the database (SQL Server 2005) serving as the repository for application data
- Developed a process (originally Access 2003, later ported to .NET) for importation of legacy hardware data (Excel)



LPL	San Diego, CA	(09/06 - 01/08)	Senior Developer
[ASP.NET (1.1, 2.0), C#, VS (2003, 2005), SQL Server (2003,2005), SSRS & SSIS 2005]			

- Developed numerous ASP.NET intranet applications within an internally developed framework, including apps for address change management, mutual fund processing preparation, and personal information release authorization management
- Developed enhancements to a remoting-based mutual fund networking Windows service
- Developed SQL Server Reporting Services (2003, 2005) reports
- Developed a SSRS 2005 delivery extension providing report delivery capability via FTP
- Performed various database-related programming tasks (DTS package development, job configuration, relational design, and ad hoc DML query execution) against SQL Server and Oracle databases

City of Oceanside	Oceanside, CA	(07/05 - 04/06)	Senior Developer
[ASP.NET (1.1, 2.0), C#, VS (2003, 2005), ASP, SQL Server 2000]			

- Ported the municipal Web Application Unit's existing ASP intranet application framework (authentication/authorization, navigation control generation, UI layout) to ASP.NET, focusing on reusable UI components (custom page class, tabstrip control, paging control, etc.) and functional components (data access, security, centralized error handling)
- Developed an ASP.NET intranet application for centrally tracking and reporting application errors generated by applications developed within the revised framework
- Adapted the open-source NetSpell (.NET 2.0) spellchecking application for use with existing and future intranet applications
- Initiated migration of an existing ASP application (used by the Police Dept. for managing citations pertaining to false security alarm violations) to the revised framework
- Performed troubleshooting and implemented corrections to an existing ASP application used by the Fire Dept. for managing citations pertaining to false security alarm violations

LPL	San Diego, CA	(07/04 - 01/05)	Senior Developer
[SQL Server 2000, VBA (Excel), ASP.NET (1.1), C#, VS 2003]			

- Performed data analysis and developed stored procedures and DTS packages for the purpose of transforming and importing financial account cost-basis data from an assimilated firm into the company's legacy BETA financial transaction system
- Developed a series of automatically-generated periodic reports in Excel format utilizing DTS packages, stored procedures, and VBA for Excel
- Performed research and initial development of an ASP.NET (C#) platform reporting engine for delivering custom on-the-fly XML reports for Excel consumption
- Provided ad-hoc reports at the request of members of business units

MCA	Charlotte, NC	(08/01 - 10/03)	Senior Developer / DBA
[ASP, ADO, VBScript, JavaScript, ASP.NET (1.1), C#, IIS 5.0, COM+, SQL Server 2000]			

KOSA	Charlotte, NC	(03/00 - 04/01)	Developer
[ASP, ADO, VBScript, JavaScript, DHTML, IIS 4.0, SQL Server 7.0, Visual Basic 6.0]			

Bank of America	Charlotte, NC	(12/98 - 09/99)	Developer
[ASP, ADO, Access 97, SQL Server 7]			

Lillick and Charles	San Francisco, CA	(01/98 - 09/98)	Developer
[Access 97, VBA, SQL Server 6.5, VB6]			

EDUCATION	B.S., Psychology (1992); B.S., Anthropology (1992)	Kansas St. University
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