Mark Harr

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Functional summary	42 years' experience in Programming, Systems Analysis, and Project Leader positions, including 11 years mainframe development and 32 years PC / Client-Server / Internet-Intranet and mobile development. Recent emphasis in iOS/Android development using PhoneGap/Cordova mobile development, Windows/Web/Azure .Net development and SQL Server development and administration, ASP.Net/MVC/WPF/MVVM/AJAX/jQuery/HTML web site development. Extensive experience in medical systems, privacy management, ecommerce site integration, securities transactions, insurance and rating, real estate and title systems, transportation, sales management and tracking, manufacturing and inventory management, warehouse distribution, order entry, and miscellaneous office applications and systems.

Employment

2009 – current,

2005 – 2008   Oxford & Associates   Beachwood, OH

Sr. Consultant; .Net development

- Consultant and architect specializing in Microsoft technologies and products. Project development, package implementations.

2008 – 2009   Exential, LLC   Brecksville, OH

Sr. Consultant; .Net Development, SharePoint

- Consultant and architect specializing in Microsoft technologies and products.

**2003 - 2005   Foresight Technology Group;   Brecksville, OH
                        Berbee Information Networks**

Sr. System Architect; Sr. Consultant

- Consultant and architect specializing in Microsoft technologies and products. Project development, package implementations.

2001 - 2003   Mediquant, Inc.   Broadview Heights, OH

System Architect; Lead Developer

- Software company specializing in Medicare billing review systems. Rearchitected two major product lines to Microsoft-based multi-tier systems including web-client capabilities, signature capture, and remote updates and maintenance.

2000 - 2001   Analysts International   Independence, OH

System Architect; Project Manager; Senior Consultant

- eBusiness Solutions Group, projects involving website development (including eCommerce site), enterprise-wide application development.

1995 - 2000   LDA Systems; Computer Associates   Brecksville, OH

System Architect; Project Manager; Senior Consultant

- Co-developed the Microsoft Solutions Group, a focused consulting service to research and prototype the latest Microsoft Technologies for client, and provide off-site rapid system development.

1994 - 1995   Independent Consultant   Parma, OH

- Project development and management, focusing on MS Technologies.

1994   Roadway Information Technologies   Akron, OH

Project Manager

1981 - 1994   American Greetings Corp.   Brooklyn, OH

Technical Specialist, Project Leader, Senior Analyst/Programmer

1979 - 1981   Cleveland Federal Saving & Loan   Cleveland, OH

Programmer; Computer Operator

Significant Project Achievements	

Consumer/Industrial Coatings Company
- Developed common-use API for color formulas, to be used in multiple applications (POS, tinting machines, marketing).
- API hosted in Azure services. Extracted data from lab systems using Azure Data Factory, loaded in documents in CosmosDB. API written in C# MVC, running in Azure Web Service.
- Additional queue application to support international retail POS system sending orders to tinting machines, after validating orders against Color API above. Used Azure ServiceBus and Azure Functions.
- **C# 10.0, ASP.Net Core, MVC 5, SQL Server 2017, Azure Data Factory, Azure Functions, Azure Web Services, CosmosDB, Azure DevOps (git, issue tracking, sprint tracking).**

Transportation/Logistic Company
- Redesigned existing portal written in DotNetNuke to ASP.Net Core MVC. Apps used to convert/supplement data as moved from warehousing to transportation systems, and to enable customer data imports (invoices, parts/pricing, returns).
- Developed 2 custom barcode labeling apps for custom client needs. One created UCC128 labels, the other custom Code 3of9. Both picked up part an package information from warehouse systems to generate custom labels required for their client packaging needs. Both desktop apps used common server for generating the label images, to easily enable new labels and customizations for all networked workstations using the app. Barcodes were generated using .Net graphics methods (not 3rd party packages or fonts).
- **C# 9.0, ASP.Net Core, MVC 5, Html5/CSS3/Bootstrap5, SQL Server 2017, WPF**

Medical Device Startup
- Developed kiosk-tablet applications to support new endoscope.
- One app for testing handpieces, scopes, and camera elements, developing pixel-based correction tables for LED lightning, pixels, black/white corrections, and color correction. Correction tables written to flash chip on handpiece and/or scope.
- Another app for tablet to provide real-time streaming, applying LED, pixel, white level, and color corrections, and autoexposure for image, high-performance multi-threaded processing maintaining >50 fps.
- Developed, configured Windows IoT tablet for secure, locked-down usage of application in kiosk mode (no Windows shell visible or accessible).
- **C# 2019, WPF, FTDI comms (handshake and streaming), Windows 10 IoT, Windows Config. Designer, Windows System Image Manager, dism**

Consumer Brand Company
- Developed application for extracting, summarizing, and converting data from disparate Oracle system to SQL Server system.
- Application ran as Windows desktop application for ad-hoc usage, and command-line options to use for scheduled tasks.
- Configuration for data queries (both input and output) done dynamically using XML files, and dynamic objects, requiring minimal code-based maintenance
- Discrepancies encountered during conversion reported by email or log files (text or html).
- **C# 2019, Oracle 11, SQL Server 2017**

Transportation/Logistic Company
- Redesigned existing portal (parts written in DotNetNuke) to ASP.Net MVC. Apps used to convert/supplement data as moved from warehousing to transportation systems.
- **C# 2017, ASP.Net MVC5, Html5/CSS3/Bootstrap4, SQL Server 2012**

Significant Project Achievements (cont.)

Regional Medical Company
- Application website to provide public searchable access to clinical trial data from internal application, supplemented with data from national government site.
- Website uses Html SPA page to make Ajax queries to custom API, which call Rest APIs for internal Redcap site, and Rest API to clinicaltrials.gov site.
- **C# 2017, ASP.Net MVC WebAPi2, jQueryMobile**

Mfg Machine Distributor
- Redesigned existing asp.net webforms portal to custom ASP.Net MVC application, deploying to Azure Cloud App Service.
- Implemented federated authentication using Azure AD B2C, backed by linked on-site Active Directory and allowing custom B2C accounts.
- Developed application using staged technique, to allow migrating portal applets to be converted as needed or run on legacy server.
- **C# 2017, ASP.Net MVC 5, Html5/CSS3/FoundationCSS, Azure AD B2C, Azure App Service, Azure SQL Server**

Mfg Distribution Company
- Upgraded collection of apps/systems for better maintenance, increased reliability, better logging/reporting, and current platforms. Apps were written Vb.Net, SQL Server, Access, Excel.
- **VB.Net 2017, SQL Server 2005**

Regional Medical Insurance Company
- Maintained customer-facing web application for maintaining customer healthcare information.
- **C# 2015, ASP.Net 4.0/MVC4, Html5/CSS3, jQuery 2.x, Sitecore 7.x**

Regional Property Insurance Company
- Developed master agency/producer repository to replace mainframe system, integrating with 10-12 other systems for agency information.
- Developed WorkQueue application, integrated with Documentum to handle incoming customer service processing.
- Developed Document Search application for querying Documentum document management system by customizable and variable search criteria.
- All these applications developed as ASP.Net MVC, WebApi, and Entity Framework.
- **C# 2010, ASP.Net 4.0/WebAPI2, Html5/CSS3, jQuery 2.x/3.x, jQueryMobile 1.11/1.12, EF 6**

Regional Medical Company
- Developed mobile applications and web applications for patients and staff.
- Mobile web applications developed using jQueryMobile for responsive design, including providing multi-pane pages for wide browsers (desktop and tablets).
- Mobile applications for Android and iPhone/iPad, using PhoneGap. Used Visual Studio Tools for Apache Cordova for development.
- Both used RESTful web services built using ASP.Net MVC/WebAPI2 for backend web services
- **C# 2013, ASP.Net 4.5/WebAPI2, Html5/CSS3, jQuery 1.11/2.1, jQueryMobile 1.4.5, VS Tools-Cordova**

Mfg Company
- Enhanced shop floor application for tracking JIT inventory.
- Increased performance 80%, reducing lines of code over 90%, and added flexibility for unlimited bin display (was limited because of bad performance).
- Added printed pick lists. Added resizable and scrollable display to fit various large TV monitors on shop floor.
- **C# 2013, WinForms, SQL Server 2012.**

Significant Project Achievements *(cont.)*

Mfg Distribution Company
- Converted order mgmt system from Classic ASP to current Asp.Net.
- Helped implement transition to Agile methodology for development teams.
- Converted public website for outside marketing agency to internal CMS using Orchard.
- Assisted in many projects rebranding/integrating/converting processes and systems as company was acquired by another company, and long-time staff left or was transitioned out.
- **C#/VB.Net 2012-13, ASP.Net 3.5/Ajax/MVC, Html5/CSS3, jQuery 1.11,, SQL Server 2005/08, iSeries DB2, TFS 2010, Windows Server 2003-05, Agile**

Manufacturing Company
- Helped implement multi-language international website for their products.
- Website included product information imported from ERP system, regional availability, manuals/reference/MSDS, videos, and catalog cross-reference system.
- Application was integrated into Orchard CMS, providing marketing ability to add pages, promotions, and page widgets to link appropriate content.
- Website designed with responsive web design techniques, to provide support for PCs, tablets, and mobile phones.
- **Html5/CSS3, jQuery 1.8, Twitter Bootstrap, ASP.Net/MVC C# 4.0, SQL Server 2012, LLBL GenPro, Window Server 2008, Agile, TDD, Rally**

Online Communications Company
- Developed multi-platform mobile application (iOS and Android) to enable their client's users to manage and receive critical communications on their mobile devices. Used common Html5/CSS3 web pages, enhanced with PhoneGap to build native apps for packaging/delivery on app store.
- Enhanced backend web services to enable use by more html/ajax applications, enabling Ajax/Json endpoints in addition to existing Soap/Xml services.
- **PhoneGap 1.6-1.81, Html5/CSS3, jQuery, jQueryMobile, iOS 4.3,5.x,6, XCode 4.4, Android 2.2-4.03, Eclipse, ASP.Net/ C# 4.0, SQL Server 2008, Window Server 2008, Agile**

Online Business Services Company
- * Redeveloped marketing site using CMS and updated design (from design agency). Restyled 600 page members site to align with new style.
- * Developed common reporting WCF service to serve 6 client systems with consistent end reports (primary deliverable for their clients)
- * **ASP.Net/MVC3/C# 4.0, Ajax/jQuery, SQL Server 2005/8, Window Server 2008, Agile**

Industrial Company
- * Redeveloped marketing literature site (including e-commerce) and company's public facing site.
- * Literature site developed to be multi-site, so many divisions of company all can store all literature, articles, videos, software; over 600 downloadable files.
- * **ASP.Net/C# 3.5 SP1, Ajax/jQuery, SQL Server 2005, Window Server 2008**

Startup Company
- * Developed prototype in .Net Compact Framework/Windows Mobile application, .Net Web Service. SQL Server 2008 w/spatial data for geolocation tracking and proximity searching.
- * **Windows Server 2003 R2, VB.Net 2008,.Net CF 3.5, ASP.Net 3.0, SQL Server 2008**

Mfg Distribution Company
- * Converted order mgmt system from Classic ASP to current Asp.Net.
- * Re-designed IT development application production promotion processes and SCS for both .Net and Java developers, implementing QA staging servers and SOCS compliant procedures.
- * **Windows Server 2003 R2, VB.Net 2008, ASP.Net 3.5/Ajax, jQuery, SQL Server 2005, iSeries DB2, Subversion 1.5**

Significant Project Achievements
(cont.)

Teleradiology Company
*   Architect, Lead Developer, DBA for managed services company
*   Managed migration of primary company application to Window Server 2003 R2 Terminal Server and SQL Server 2005.
*   Designed and developed Order Entry system merging incoming fax images and Dicom image information to verify and correct mismatching information.
*   Designed and developed Report Distribution system to produce, manage and efficiently distribute radiologists' patient reports, providing multiple options for format (pdf, tiff, rtf, xml) and delivery (ftp, email, fax, web service, HL7).
*   Develop multiple applications to integrate and smooth workflow issues between systems, remote clients, radiologists, and transcriptionists.
*   **Windows Server 2003 R2, VB.Net 2005, ASP.Net 2.0/Ajax, SQL Server 2005, SQL Broker Service, Exchange 2003 WebDav, Dicom**

Publishing Company
*   Architect and Developer for Privacy Management system for major trade magazine publisher.
*   Developed .Net systems for managing subscribers' privacy preferences for email, fax, and phone.
*   Included public internet opt-out sites, intranet database management, and intranet for magazine staff to scrub mailing lists before communication campaigns.
*   **Windows Server 2003, C#.Net 2003, SQL Server 2003**

Mfg Distribution Company
*   Architect and Developer for Demand Planning system for manufacturer products distribution company.
*   Developed .Net intranet system to review inventories, customer orders, production and purchase requisitions, and forecasts to determine potential inventory shortages and recommend replenishment orders.
*   System integrates with AS/400 manufacturing and ERP systems to collect data on daily basis, and produce hotlists of items needing attention.
*   **Windows Server 2003, VB.Net 2003, SQL Server 2000, Client Access/400**

Mfg Distribution Company
*   Architect and Developer for redesigning software product from an MS Access based design to a multi-tier design using SQL Server.
*   Design components to be flexible to install and run as single user system, shared database system for workgroup, or client/server network installation.
*   Significant features included: multi-tier application, Access to SQL Server (MSDE) database migration; multiple languages, international export, and encryption.
*   **Windows 2000/2003 Server, Windows 98/Me/NT4/2000/XP Clients, Visual Basic 6.0, MTS/Com+ Components, ADO 2.7, SQL Server 2000/MSDE, Wise Installer.**

Medical Software Company
*   Architect and Developer for redesigning two software products from an MS Access based design to a multi-tier design using SQL Server. Further redesign to .Net client architecture.
*   Significant features included: shared middle tier for both Windows client and web client front-ends; patient signature capture (compliant with Electronic Signatures Act), low-cost maintenance and remote system maintenance features.
*   **Windows NT4/2000 Server, Visual Basic 6.0/.Net, ASP.Net, MTS/Com+ Components, IIS 4.0/5.0, ASP 2.0/3.0/.Net, ADO 2.6, VBScript, JavaScript, HTML, SQL Server 7/2000/MSDE.**

Enterprise Applications
*   Project Leader, Architect, and Developer for integrated, enterprise-wide applications for medical testing company. Developed 5 applications for customer service, scheduling mobile equipment, sales support, marketing support, and external vendor support.
*   Built combined in-house client-server applications and private, secure website applications, using common components and database.
*   **Windows 2000 Server, Visual Basic 6.0, Com+ Components, IIS 5.0, ASP 3.0, ADO 2.6, VBScript, JavaScript, HTML, SQL Server 2000, VeriSign Payflo.**

Significant Project Achievements (cont.)	**eCommerce Website**
	   * Project Leader, Architect, and Developer for web eCommerce site for company providing display supply products for retail stores.
	   * Included catalog of >4,000 parts, integration of customers and pricing with existing legacy ERP system.
	   * Took over this project as an existing failed project (after 15 months) and restarted development and design to bring new site up in 3½ months.
	   * **Windows 2000 Server, Visual Basic 6.0, Com+ Components, IIS 5.0, ASP 3.0, ADO 2.5, VBScript, JavaScript, HTML, Netscape and Microsoft browsers, SQL Server 7.0, Navision Financials.**

Accreditations	1999; Microsoft Certified Solution Developer 1994; Microsoft Certified Professional, Visual Basic 3 1990; Certified in Production and Inventory Management; APICS

Technical Qualifications

	PC Development:	**PC Packages and Systems:**
Extensive Experience:	Microsoft Visual Basic 1.0 - 6.0; VB.Net 2003-2019, C#.Net 2003-2022, including dozens of custom controls, .Net CF 3.5, .Net Core 3.1-5.0 Microsoft SQL Server 4.2 thru 2019, MSDE, SQL Broker Service Microsoft Transaction Server 2.0, Com+ Microsoft COM/DCOM/RA/Web Services/WCF/WebAPI2 Microsoft Azure App Service/App Functions/AD/AD B2C Microsoft Internet Information Server 3.0/4.0/5.0/6.0/7.0/7.5/8/8.5/10/11 Microsoft Active Server Pages 1.0-5.0, .Net 1.1-4.7/Ajax/MVC3/MVC4/5 Microsoft Data Access Objects (DAO) 1.0–4.5 Microsoft Remote Data Objects (RDO) 1.0/2.0 Microsoft ActiveX Data Objects (ADO) 1.0/2.0/2.1/2.5/2.6/2.7/.Net/.Net 2.0,3.5,4.0 Microsoft VBScript, VBA, Windows Scripting Host JavaScript / Jscript 1.0 / jQuery / jQueryUI / jQuery Mobile PhoneGap 1.6-1.8.1, 4.1-6.0; various plugins Xamarin for Apps in Android, iOS, and macOS Microsoft EntityFramework 4/5/6 Bootstrap 4.x,5.0	Microsoft Access 1.0 – 2016,365 Microsoft Word for Windows 1.1 – 2016 ,365 Microsoft Excel 3.0 – 2016 ,365 Windows 3.0, 3.1, 3.11, 95. 98. ME Windows NT 3.1, 3.5x, 4.0, 2000, XP, 2003, Vista, 2008, 7, 2008R2, 2012, 8, 8.1, 10, 11 Mac OS, Mountain Lion – Monterey Parallels VM
Moderate Experience:	VS Code (Mac and Windows) LLBL GenPro 3.1, 3.5 Sybase SQL Server 4.9.2 thru System 11 Oracle 6.x/7.x/8.x Microsoft Visual Interdev 1.0/6.0 Allaire Homesite 4.0/4.5/5.0/5.5 Microsoft FrontPage 97,98,2000,2003; Expression Web/Studio 2.0,3.0,4.0 Microsoft Visual Basic for DOS IBM 3270 Communications & EHLLAPI API Programming IBM MQSeries NT Client Development Easel/DOS Application Development 5.0-6.1 Xcode 4.4-6.2, ObjectiveC (iOS development) Eclipse 4.3, (Android Development); Android Studio Foundation CSS	Azure DevOps Rally Agile Project Mgmt Microsoft Team Foundation Server 2010/2015 Agile Template Microsoft SharePoint Portal Server 2003/2007/2010/2013 Microsoft Great Plains 7.5 Microsoft Small Business Server 2003/2008 Visio 4.0/5.0/2000/2003 Microsoft Project 3.0-2007 Microsoft Project Server 2003/7 PCBoard BBS 14.5, 15.0 Microsoft Powerpoint 3.x-2003 Harvard Graphics S-Designer Telerik Agile Workbench
Some Exposure:	Microsoft COBOL & Realia COBOL	Project WorkBench EasyCase Plus ProKit Analyst