Edward Rush

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Summary

Expert IT Senior Analyst with a successful 17 year tenure in the Software Architect Industry. Established track record of excellence; knowledgeable in Mobile, Cloud/Web, and Database Technologies; Educator and Adjunct Instructor for the North Carolina Community College System; Reputation as a problem solver, decision maker, analytical thinker, with the ability to function as a leader and follower; capable of meeting strict deadlines and exceeding expectations, ability to execute duties in keeping with the company vision and mission, works well under pressure, and has excellent interpersonal communication skills.

Education

2008 | Master Of Science in Information Technology
- UNCC Graduate School, Charlotte North Carolina

2003 | Bachelor of Science in Computer Science
- Limestone College, Gaffney South Carolina

2001 | Associate of Science in Computer Programming
- Cleveland Community College, Shelby North Carolina

2001 | Certification in Database Management
- Cleveland Community College, Shelby North Carolina

1999 | Diploma in Machining Technology
- Cleveland Community College, Shelby North Carolina

- **Current Central Piedmont Community College (CPCC) Advisory Board President**

Certifications

2017 | Certified Xamarin Developer
Microsoft Xamarin University

https://devconnect.xamarin.com/profile/576

2017 | Certified ScrumMaster
Scrum Alliance

https://www.scrumalliance.org/community/profile/erush4

http://bcert.me/sgtqmratl

Experience

2018 - Current | Integration Engineer / Solution Architect
AAA Of The Carolinas | Charlotte NC

Integration Engineer and Solution Architect working with Membership Renewal and Join Customer ASP.NET and Cloud Base Technologies.
Accomplishments:

Integration of Renew Software with SalesForce and SalesForce OAuth. Enabling Authentication into current system from Saleforce Communities and Legacy Login Applications.

Integration of Renew and Membership Management Software with Azure Service Bus, Azure Functions, Azure Queues and Deadletter Management of Queues – Blob Storage and Table Storage. Interfacing with WebAPI and Lansa APIs for the AS400. VSTS and TFS with Automated Deployments for Azure and Local System.

2018 – Spring and Fall Semester | Adjunct Instructor
CPCC (Central Piedmont Community College)| Charlotte NC

WEB 141. Mobile Interface Design. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course covers current design standards and emerging approaches related to the design and development of user interfaces for mobile devices. Emphasis is placed on research and evaluation of standard and emerging practices for effective interface and user experience design. Upon completion, students should be able to design effective and usable interfaces for mobile devices.
WEB 151. Mobile Application Development I. 3.0 Credits. Class-2.0. Clinical-0.0. Lab-2.0. Work-0.0
This course introduces students to programming technologies, design and development related to mobile applications. Topics include accessing device capabilities, industry standards, operating systems,

and programming for mobile applications using an OS Software Development Kit (SDK). Upon completion, students should be able to create basic applications for mobile devices.

2013 - Present | Architect Mobile/Web Contract
Paker Hannifin | Kings Mountain NC

Architect System using MVC ASP.NET and SQL Server, Printing with Data Matrix Technologies and Hand Scanning Web Based Technologies
Accomplishments:

Architecting and Developing systems that use Computer Based Hand Scanners that interface with Web Based technologies to capture stream data via web pages. This system interfaces with SQLServer to perform operations that eventually translate into a finished Label for packages being shipped. The system was designed to be very dynamic to enable multiple forms of data entry that is controlled through Database configuration and translated into an ASP.NET Web Interface. The system is completely parameter driven so that Label requirements from various customers could be supported by providing a system of configuration for specific Labels yet still use the same Web technology to collect the required information.

Currently working on a system that will expand the scanning to support Android applications on the shop floor.

2013 - 2018 | Architect Mobile/Web
Snyders-Lance Inc. | Charlotte NC

Senior Architect in solution for Snyders-Lance DSD Route System. System integration with Oracle, SQLServer, and JDEdwards. Oracle is the ERP. Microsoft Mobile Compact Framework 3.5 used on Windows Mobile 6.5 to support more than 3500 Routes. Microsoft MVC used for supporting applications. SQLServer/SQLCLR used for Handheld integration to Oracle. SQLServer/SQLCLR/SQLCE was used for applications supporting Mobile and Web Frameworks. Xamarin Cross Platform used for migration to iOS and Android devices. SQLite used with Xamarin. C# is the language used
Accomplishments:

- Route Sales Application Running on 3500 Routes. Wrote Image Capturing process for the Mobile Device to capture the image and then scan for barcode data on the image to verify Invoice Numbers. Developed Pricing and Invoicing mechanisms for Complex Business processes. Developed Architecture that worked across 7 applications that ran on the device. Each application has a purpose and they share the same core architecture. The Bridge Pattern was heavily used to provide a separation of concerns, and prevent cross references.
- Participated in major Cut Over from a JDEdwards system to an Oracle System with the Handheld Download and Upload Data. All 3500 Routes were disconnected before cutover, and then the cutover occurred, the Route transmissions were allowed access. Did the same thing previously with Lance when Cutting over from a AS400 system to

Oracle. This was a major achievement as we had not loss of data even though the entire Customer Number base changed in the new ERP.

- Profiled and monitored the applications on the device so that memory pressure was never an issue.
- Database Performance was controlled through Abstracting Table Direct Operations in SQLCE to prevent the SQL Engine from Parsing Queries that created memory pressure.
- Supporting Web Applications in MVC to provide tools for research and accessing Route Upload and Download Data
- SQLServer Database Development with use of Partitions to house 50,000 – 60,000 uploaded images daily from Route System.'
- Rest Services, and Xamarin Applications for Software Migration from Legacy Windows Platform to Modern Mobile Platform.

2011 - 2013 | Senior Application Developer
Swisher Hygiene | Charlotte

Senior Architect in the supporting systems for the field service operations and field service billing. Microsoft MVC used for support and data entry applications. Great Plains(GP) was the ERP. SqlServer was the main Database used. SQLCLR was also used. WCF was the Web data transfer mechanism used. C# was the language used.

Accomplishments:

- WCF Web Services to allow 3rd Party Vendor a means of Uploading Route Sales Data. Secured with generated certificates to allow secure message level transmissions. This process was tightly integrated with SQLServer, in which the SQLServer XML type was used for all parsing of incoming messages. This method was very fast and efficient.
- MVC Data entry application, designed to allow fast keying operations on the Web UI. Javascript, and custom Communication Mechanism developed to provide performance. Backend Data Partitioning in Memory to allow fast access to invoice data for over 1 million records.
- Custom threaded process developed to connect to Avalara Tax service to generate tax information on incoming invoice data from the handheld devices.
- Custom threaded process developed to transmit Download data to 3rd party vendor.

2011 | Project Lead
Alex Lee Inc. | Hickory NC

Project Lead for Technologies supporting Foods To Go Application Development. SQLServer was the Database System used. Microsoft MVC was used for the supporting applications. C# was the language used.

Accomplishments:

- Custom Image MVC Restful Service to provide image data based Web page requests
- Store Image Data in Database for robust access by web pages.

- Threaded process to load licensed images from Image Supply companies by accessing FTP sites. These images where dynamically resized for specific views on the webpage and stored.
- Build packaging label dynamically to follow FDA guidelines for Product specifics. This was also used on website requests.

2006 - 2011 | Senior Application Engineer
Lance Inc. | Charlotte NC

Senior Architect in solution for Lance DSD Route System. System integration with Oracle and AS400. Oracle was the ERP. Microsoft Mobile Compact Framework 2.0 used on Windows Mobile 5 to support more than 1200 Routes. SQLServer/SQLCLR/SQLCE was used for applications supporting Mobile and Web Frameworks. ASP.NET 3.5 Webservices, and Applications were used for supporting applications and systems integration. C# was the language used.

Accomplishments:
- Central Billing Web Application that allowed fast data entry by the users.
- Built Pricing Validation mechanism for Central Billing Application the repriced every line entry based on Customer, Authorization and Date.(Oracle and SQLServer Integration)
- Participated in major Cut Over from a AS400 system to an Oracle System with the Handheld Download and Upload Data. All 1200 Routes were disconnected before cutover, and then the cutover occurred, the Route transmissions were allowed access. This was a major achievement as we had not loss of data even though the entire Customer Number base changed in the new ERP.
- Developed handheld application that serviced 1200 Routes, for Invoicing, Selling and Sales History
- Developed Integration process for incoming Upload Data and Download Data between Oracle and SQLServer
- Developed SOAP based Web Services that serviced all custom applications. This service was secure and fast, and provided all access to backend systems by all internal applications. Full SOA architecture for all internal applications.
- Built internal Web support applications for Route Data

2005 - 2006 | Software Engineer
ChoicePoint | Charlotte NC

Software Engineer in solution for Background Checking services. SQLServer 2000 and 2005 were the Database Systems used. ASP.NET 2.0 Webservices, Windows Services with C#, and MSMQ was used in supporting applications. Visual Basic 6.0 was also used in supporting applications.

Accomplishments:
- Developed Web Services that integrated with MSMQ for Custom Application for Target Stores Background Checking
- Worked on Visual Basic 6 Application in a Support role

- Developed mechanism to work with a 3rd party SQL Server Plugin to encrypt and split data and save in text fields. This was prior to the release of SQLServer 2005.

2003 - 2005 | Lead Internet Technologies Instructor
Cleveland Community College | Shelby NC

Lead Instructor for Web Programming and Web Design Technologies. Developed curriculums for technologies required to complete the Degree. Technologies included .NETFramework 1.1 introduction ,ASP.NET, VB.NET, Visual C++, C#, Photoshop, Macromedia MX Stack(Flash, Dreamweaver), HTML and JavaScript.
Accomplishments:
- Developed a Curriculum that provided training for .NET when it was initially released.

2001 - 2003 | Pogrammer/Analyst
Stabilus | Gastonia NC

Lead Developer for Manufacturing Shipping Application. Microsoft Access was the Database system used. eMbedded Visual C++ was the programming language for the Mobile Device. PocketPC 2000 was the Operating System Targeted. Visual Basic and Visual C++ was also used for supporting applications.
Accomplishments:
- Develop mobile scanning application that serviced the packing department for managing shipments to GM and Toyota.
- Developed supporting applications for managing the scan collected data and printing necessary labels

1997 - 1999 | Die Mechanic/Machinist
AMP Inc | Gastonia NC

Machinist using lathes, mills, and surface grinders. Operation of 30 Bruder Presses. Repair and troubleshooting of highspeed progressive dies. Geometrical Dimensioning and Tolerancing was used.

1991 - 1997 | Machinist
Danaher Tool Group | Gastonia NC

Machinist using and setting up machines (V&O Presses, ACME, and 300 Ton Minster Press

Skills
- **Most Current Technology Stack and Concepts**
  - Xamarin Cross Platform with Visual Studio for MAC and Windows
  - Windows Mobile 6.5 with Compact Framework 3.5
  - SQLServer, SQLCE, Oracle, SQLite
  - TSQL
  - C#
  - SQLCLR

- ASP.NET MVC 5 with Razor
- Reflection
- Generics
- Javascript, JQuery and CSS Frameworks(YAML, Foundation)
- Restful Services
- Image Capturing, transferring and storing (Base64, Windows Mobile, Database Partitioning with SQLServer)
- Some Design Patterns: Singleton, Dependency Injection, Bridge, Fluent, Partitioning, MVC, MVVM
- Threading and Async Methodology
- JSON and XML Serialization/Deserialzation
- Mobile Device Hardware (Honeywell CN51, Motorola MC9596)
- ADO.NET
- VSTS
- Azure
  - Azure Functions
  - Logic Apps
  - Service Bus with Queues
  - DataMatrix

- **Past Technology Stack**
  - WCF (Windows Communication Foundation)
  - PLSQL with TOAD
  - Oracle ODP.NET
  - Windows Mobile 5, PocketPC 2000
  - Compact Framework 1.0, and 2.0
  - eMbedded Visual C++
  - Visual C++
  - Photoshop
  - Visual Basic 6.0 and VB.NET
  - XML/XSLT
  - Macromedia Stack (Dreamweaver, Flash)
  - Access
  - ASP.NET SOAP Web Services
  - Mobile Device Hardware(Symbol PPT2700, Motorola MC9090)