

Brian Eckelman

Waukesha, WI

PROFESSIONAL SKILLS

Innovative Solutions

- Responsible for developing a set of applications and services for asset tracking. The system uses active RFID tags that communicate over a WiFi network. The applications and services are written using C#.NET. These communicate with each other using Windows Communication Framework. Also created a thin-client management console and quick-find that runs on ASP.NET back end on IIS. Data is stored in SQL 2005 database.
- Responsible for developing an application for Windows CE devices to locate assets. Asset tags communicate over an ad-hoc WiFi network with the PDA . The system can operate independently, or in conjunction with existing infrastructure.
- Responsible for extending the functionality of the CORE product line by adding components to interface with Cisco phone systems. This allows the system to be configured to send text pages to IP phones on the system so the personnel can see the alerts and clear them at the point of care.
- Responsible for extending the functionality of the CORE product line by adding components that send SMTP e-mail and SMS text messages in response to alarms. This follows the same escalation procedures as the pager system. If alarms are not serviced in a predetermined time, then the message is sent to the next person in the list. This product line is written using C++ for the services and Java for the user interface.
- Responsible for installing and maintaining Windows Servers and SQL Servers. Installed and maintain several instances of Windows2003 and 2008 server, SQL 2005, and LINUX on virtual machines on a pair of hardware servers for use in developing and testing the companies software products.
- Installed and maintain Trac and Subversion for wiki and document control, and Bugzilla for issue tracking.
- Responsible for developing a suite of applications for the “do-it-yourself” industry. The software is used in home improvement stores to allow the customer to quickly build decks, garages and more. It integrates into the store’s point of sale system. These are written using C/C++ and MFC.
- Responsible for developing a catalog application that allows the client to integrate paper, web, and CD catalogs into one system.
- Responsible for developing a suite of applications for the auto repair industry that allows the client to replace paper manuals with a CD version.
- Developed data-driven websites using ASP.Net for a school and an alumni club.
- Developed a suite of applications for finite element analysis using C/C++.

Team Leadership

- Directed several others, as needed, through the development cycle of the products. This included dividing the work into individual tasks and developing the project schedules based on the perceived abilities of the individuals.
- Mentor junior developers to assist them in completing their tasks.
- Coordinate school staff to keep their systems running smoothly.

Communication

- Was responsible for interacting with the clients to determine the customization needs
- Communicated with internal personnel to get the job done
- Use Microsoft Project to manage tasks and time lines.
- Installed and maintain an intranet wiki for use by developers and others to communicate documentation with each other.
- Use Microsoft Powerpoint to create presentations for the team and others.
- Mentor staff personnel at a school about technology systems.

Problem Solving

- Worked in close contact with clients to resolve issues with the custom solutions.
- Use various debugging tools and techniques to determine the cause of any issues.

- Developed solutions for a school to get them connected to the Internet, update and unify the office systems, implement websites and enterprise mail.

TECHNICAL SKILLS:

- Primarily utilize C# .NET and C/C++ managed extensions for employer and personal applications.
- Use a combination Microsoft Developer studio and command line tools for development of the software.
- Install and maintain Windows 2003/2008 and SQL 2005 servers.
- Use and maintain SQL server databases for use with desktop applications and websites.
- Use ASP.NET, C#.NET, VBScript, Java, JScript, PHP for various websites.
- Familiar with TCP/IP and WiFi networking, NT/2000/2003 Server, Exchange Server, SQL Server, Linux.
- Have developed applications with Visual Basic.
- Past experience with FORTRAN and other system-level languages.

PROFESSIONAL EXPERIENCE

December 2005-Present: **Sr. Software Engineer**
 RF Technologies, Inc.
 3125 N. 126th Street
 Brookfield, WI 53005

Developed an enterprise system for tracking assets. Initially targeted for the health care industry, the system enables the end user to quickly locate assets using active RFID tags utilizing their existing WiFi infrastructure. The system uses .NET remoting to communicate between the client applications and services across the network. The core services reside on Windows 2003/2008 servers and use SQL Server 2005 for the database. The client applications and administration tools run on workstations. There are also web-based clients that run in a browser, as well as mobile devices.

Developed a Windows Mobile application that runs on WiFi-enabled PDAs. The application allows the user to locate mobile assets through the use of ad-hoc WiFi connections to the asset tags. The database on the PDA can be synchronized with a SQL 2005 database on the server.

Extended the functionality of the CORE product line to allow communication with Cisco IP phones, e-mail, and sms text messages.

I also installed and maintain several Windows 2003 and 2008 servers running SQL 2005 server and IIS on hardware platforms running VMWare server. I also installed and maintain LINUX workstations used for firmware development.

December 1989-December 2005: **Group Leader - R&D - Cad Quest**
 R. R. Systems Group, Inc.
 N16 W23233 Stone Ridge Dr.
 Waukesha, WI 53188

Developed a suite of applications for the home improvement industry that are used in stores to allow the end customer to quickly design various projects. The program interfaces with the corporate database to utilize the in-stock materials and generate a bill of materials specific to the store. The solution has allowed the clients to increase revenues from outdoor projects by reducing the time required to complete the sale.

Developed a database-driven catalog application that allows the client to integrate multilingual paper, CD, and web catalog solutions into on management tool. The solution allows the client to reduce costs by eliminating the need to maintain different versions of the catalog for the various media.

Developed a set of applications for an automotive repair system. The application displays a set of specific measurement drawings for an automobile. It allows the end-user to input the measurement data and generate a report. It eliminates the need to send out paper manuals, thus reducing the cost to the company.

February 1988-December 1989: **Project Leader**
 Modern Computer Aided Engineering, Inc.
 655 W Carmel Dr
 Carmel, IN 46032

I was responsible for the product line known as Inertia. This suite of applications perform various element modeling and analysis tasks from simple beams through thermal analyses.. Inertia allows the user to input the model and then display the results in true 3D space. This benefits the user in that he/she can visualize the strengths and weaknesses of the model without have to create costly prototypes.

1984-February 1988: **Technician**
Purdue University Computing Center
West Lafayette, IN 47907

Worked as part of a team to install and maintain computer equipment and supporting hardware and wiring throughout the campus. As part of this team I was responsible for a variety of tasks from end-to-end on installation of terminal equipment. I was also responsible for wiring of the buildings, from termination of multi-pair riser cables, to connection of the fiber concentrators and terminal equipment. Starting in late 1987 much of my time was spent wiring and testing controller boards for the mainframes. These controllers were used to interface the faster mainframe to slower peripherals, such as printers and disk arrays. Each board consisted of 2000+ wires that had to be wrapped on the correct pins following the wiring plan and then tested following the test plans.

COMMUNITY INVOLVEMENT AND INTERESTS:

2006-Present
Town of Brookfield, WI
Member of the Plan Commission

2005-2006:
Town of Brookfield, WI
Member of the Board of Zoning Appeals

1995-Present:
Developed data driven website for the Purdue Alumni Club of Milwaukee. Event data and other items to be displayed are held in a SQL2000 database. This allows for updates to be made when convenient, usually after meetings, whenever the new event dates become known. It also prevents out-of-date events from being shown, thus reducing the maintenance needs of the site.

1995-2007:
St. Paul's Lutheran Church and School
7821 W. Lincoln Ave.
West Allis, WI 53219

I have been responsible for the design and implementation an enterprise technology solution. I am also responsible for the ongoing training of on-site personnel. I was able to put a unified network in place for all classroom, office and lab workstations, as well as a dedicated Internet connection. We have upgraded the student lab PCs and the office PCs. I setup Windows Server 2003 and Microsoft Exchange servers to handle the enterprise messaging and websites.

I developed data driven websites for church and school that integration with the exchange server for retrieval of calendar event items. Dynamic page generation allows non-programmers to create content pages for the website.

EDUCATION

May 1987 **Bachelor of Science - Electrical Technology**
Purdue University
West Lafayette, IN 47907