Arizona Edwards

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[Web version: http://budu.co/cv](http://budu.co/cv)

# Technologies:

**Skill Yrs Rating Details**

C++ 10 ★★★★★|★ STL, ATL, MFC, also: FCL, C++/CLI, etc.

DotNet 8 ★★★★★ Web and desktop using C#, VB.Net, C++/CLI

Python 3 ★★★☆☆ DotNet Interop, multiprocessing, Robot Testing, etc.

Java 2 ★★★☆☆ Android, JNI, Web-Applets, Tomcat

Fortran 1 ★★☆☆☆ Financial software maintenance

PHP 1 ★★☆☆☆ Website maintenance, basic sites

Databases 15 ★★★★★ Design, DDL, data access, SQL, etc.

IPTV 5 ★★★☆☆ VHO Integration, set-top-box, over-the-top, etc.

TCP/IP 5 ★★★☆☆ SSH, SSL/TLS; WS\_FTP - fastest FTP client at the time

Windows 26 ★★★★★|★ Since Windows 3.0, Internals, GDI, COM, etc.

Web 10 ★★★★★ ASP.Net, HTML, JavaScript, CSS, JSP etc.

Unix 5 ★★★★☆ AIX, Solaris, Linux; ksh, also: bash

I have experience and competency in a variety of multiple technologies and industries. Above I estimate my accumulated years of experience and a rating for each skill. I look forward to the opportunity to prove myself in interviews and via online tests, and to contributing positively to your organization.

# Competencies:

Multi-Sector Experience in Financial, Healthcare, Education, Defense, Internet, TV, etc.

Travel/Consulting Traveling for trade shows, client meetings, and internal meetings.

User Experience UX/UI design, development and testing.

Multimedia: Encoding, decoding and delivering image, video and music formats.

Education: Developing and delivering eLearning products.

Team Lead: Experience and recognition as team lead, principal developer, and mentor.

low level coding: Coding at the bit level, endianness, protocols, MIL-STD-1553, Arduino, etc.

Mobile Experience: Developing on Android and iPhone.

# Education:

Bachelor of Science in Computer Science with Math minor, Georgia State University

# References:

Please see my references on Linked In. <https://www.linkedin.com/in/arizona-edwards#recommendations>

More specific references available on request.

# Work Experience:

Bloomberg Senior Software Engineer June 2013 to present

I programmed primarily in C++, SQL and Python along with Fortran, JavaScript and shell languages, in the areas of data quality control, data migration, client data entitlements, distributed data gathering and delivery pipeline. Data License is a $750M/yr enterprise platform that delivers collated Bloomberg data to enterprise clients as files.

I also did user interface development for the Bloomberg Terminal, primarily in JavaScript.

At times I was also in rotation as a support on-call, with the possibility of being somewhat always on-call in exigent circumstances, or if the scheduled on-call was not reachable.

Highlights:

* I was the principal software engineer on the project to migrate the product we deliver to the Philadelphia Federal Reserve from an older custom infrastructure into the main Data License infrastructure.
  + I was also the principal software engineer in projects to provide the Fed with sample data to answer RFPs for new products under my team’s responsibility.
* I was one of the key developers on a project migrating several classes of mortgage securities from Bloomberg Generic pricing (BGN) to the more accurate Bloomberg Valuation (BVAL) pricing.
* I developed efficient functionality to configure and manage customer entitlement to orthogonal categories of both securities and fields.

Georgia Tech Research Institute Contract(Apex Systems) April 2012 to June 2013

I programmed primarily in C++/CLI, C++, Python and C# to develop several successful electronic warfare products for which the revenue to GTRI was in the tens of millions of dollars. I directed and coached the two student interns on my project, and indirectly provided additional mentoring to other student interns.

Highlights:

* I developed an application to monitor and control communications between devices over a MILSTD1553 serial interface and display real-time visualizations of the traffic. The application could act as bus-master or slave, record and playback traffic, and playback sensor input. My object oriented model, code structure and the reflection capabilities of Managed C++ allowed an intuitive but very rich UI with visual elements ranging from simulations of the aircraft control panel down to raw data, with pop-ups and mouse overs revealing data all the way down to individual bits and flags.
* I developed and enhanced software to control a PCI card that captured multi-channel PIR data from optical sensors and played back recorded sequences to the central processor during testing.
* I designed and developed an AN/APR-39 (Radar Warning System) simulator that could communicate with a physical AN/AAR-47 (Laser Warning System) and emulate and test the protocols for startup, version detection, and control/display integration for aircraft with both systems.
* I designed, prototyped, and programmed an Arduino based device on a powered breadboard in a nicely enclosed package with RS485 over USB connectivity and external power.

Alcatel-Lucent Software Architect May 2009 to Mar 2012

I developed prototypes and demos of Mediaroom set-top-box applications and worked on large IPTV Application architecture projects primarily in ASP.Net and C#.

As a solution line manager in the Multimedia Integration Division, I also performed a broad range of software development activities including software architecture, visual design, technology evaluation, business development, demos, trade shows, training, acceptance testing, and deployment.

Highlights

* Created prototypes and demos for the set-top-box, web, Android, VHO etc. using SQL, C#, ASP.Net, MRML and Javascript, REST, OAuth, LAMP, etc..
  + Pandora, Movie Times, Instant Messaging, Netflix Queue Manager
  + Viewer Self Service Application
  + Remote DVR including QuickPlay adaptive-rate streaming using AuthenTech DRM.
  + Multisite mediaroom web management with federated authentication.
* Pre-sales engineering , demos, UATs etc. at TELCO-TV and other trade shows USA and worldwide, and in client VHOs and offices throughout the USA.
* Development Team Liaison including travel to the development teams in Poland, England, Singapore and India.
* Deployment and support
  + I deployed our hardware and software in broadcaster VHOs around the USA.
  + This included installation and configuration of: blades, SANs, Fibre and network connections, Multi-Path I/O, Redundant NICs, IP failover, micro-subnets, Linux, Windows domains and trust, Windows failover, SQL Server failover, SSL appliances, and custom software in various hardware, VM and network architectures.
  + I maintained my own Mediaroom lab with an HP-ML170 running Microsoft Mediaroom Server connected to several set-top-boxes throughout the office. I maintained current versions of production and deployed software for testing and troubleshooting.

AT&T. F500 Contract (Chemtech) January 15 2007 to Dec 31 2008

I developed and enhanced prototypes of on-screen, customer-facing, interactive IPTV applications that run directly on the Set-Top-Box. Technologies used include C#, ASP.NET, Oracle, SQL, JavaScript, C++, DirectShow, and the Windows Media SDKs.

Highlights:

* I developed the Preferences section of the U-Verse application, including the database design, database programming, and capacity planning. This section of the application stores the user’s home city, favorite cities, and other user specific preferences. I used C#, ASP.Net, Oracle, PL/SQL, and JavaScript with Ajax.
* As part of a team, I collaborated closely with our information architects and other developers to create solutions that address the challenges of television applications. The key difficulties we mitigated were:
  + Entering text and navigating a UI with a hand-held remote.
  + Visual display elements that looked acceptable on a wide variety of display technologies and qualities.
  + The user’s implicit expectation of the same level of reliability from integrated apps as their television service, much higher than expected from Internet service, or SmartTV apps.

Agile Technologies LLC. Contract Programmer January 2006 to March 2006

In C++, I created an Active-X control in a single, signed, self-registering DLL to allow the J2EE application that Agile had developed for PackageXpress to communicate with the retrograde hardware at the retail stations.

The ticket agents used Windows 98 workstations with IE6 attached to a luggage scale, a coupon printer, a regular printer, and a debit card PIN pad, along with other peripherals. The multi-threaded Active-X control maintained the connections with the luggage scale and printers via the parallel ports and the debit PIN pad over the serial port.

I developed the web harness and the documentation in HTML and JavaScript.

NextGen Healthcare Consultant January 2005 to August 2006

I developed custom solutions to help several new customers convert their health care and accounting data from other software formats into NextGen formats. I wrote programs to generate various regulatory reports from customer databases. I programmed extensively in Excel using both macros and VBA, as well DotNet Interop for Microsoft Office using C# and VB.Net. I travelled to client sites to observe workflow, determine requirements, and demonstrate solutions.

Projects included working with HIPAA Compliancy, HL7, SQL, XML, Microsoft VBA, SQL Server, MSMQ, Microsoft Office, Crystal Reports and Infragistics.

Rhodes Financial Services Senior Software Developer Sept 2003 to Nov 2004

I worked primarily on parts of www.taxslayer.com, the company’s online filing website using VB.NET, ASP.NET and SQL Server. I wrote code to dynamically generate the web forms required for each state from metadata about each state’s tax forms.

I wrote auxiliary processes and services in C# using MSMQ, XML, and Exchange.

Ipswitch Inc. Principal Developer March 1999 to September 2003

I worked on several versions of WS\_FTP, the most sold FTP client in the world. I was responsible for and developed the FTP engine for version 7. WS\_FTP included extensive work in sockets, TCP/IP, FTP, Windows, and C++ as well as SSL/TLS and SSH.

Highlights:

* My goal for version 7 was to make my FTP engine the fastest in the world. I achieved that goal against all known products available for comparison.
* I wrote parts of the UI, delving deeply into the Windows SDK, GDI and COM infrastructure
* As a principal developer, I travelled to and participated in company design and architecture meetings, as well as product feature and strategy meetings.

Asymetrix Learning Services Contract(TelTech) January 1997 to February 1999

Asymetrix specialized in Computer Based Training (CBT) and Web Based Training (WBT) for high profile clients in many industries. I developed sites and applications in Asymetrix Toolbook, HTML, JavaScript, C/C++, Active-X, and Java. I developed projects for American Airlines, Union Camp, ADP, Bank of America, Fidelity Investments, and others.

Delta Technologies Contract(TelTech) January 1996 to November 1996

I was a team lead on parts of a new Windows based front end to Delta’s reservations system, written in C++.

Federal Reserve Bank Contract(TelTech) May 1994 to December 1995

I engaged in a wide range of activities including user requirements gathering, design, user training, code maintenance, and new development in C++ and SQL. I developed many of the shared DLLs used by other programmers. I received several internal commendations for excellent work.