Charles A. Bedrosian

Chicago · Illinois · (312) 772-3358 · work@bedrosian.com · linkedin.com/in/charlesbedrosian · @cbedrosian

SUMMARY

Charles is a Software Engineer with experience in mobile, architecture, design, hands-on development, leadership and mentoring roles. He can be counted on for delivering results and making his manager's technology worries go away.

- Experienced mobile developer specializing in iOS development for iPhone & iPad along with mobile architecture, cross-platform concerns, Android and Windows Phone.
- Seasoned architect, analyst and developer with professional experience working for fortune 500 clients as well as small dot-com start-ups
- Experienced with cutting edge technologies and current best-practice development methodologies including mobile development, cloud computing, agile methods, test-driven development.
- Makes projects succeed through rapid, high-quality development
- Broad technical experience delivering solid solutions to a client's business problems
- Extensive experience in developing all aspects of a variety of e-commerce systems
- Extensive middle tier and server-side development experience utilizing such tools as .NET, Ruby, C++, Java; experience in emerging technologies.
- Broad background and eagerness to learn new technologies enables Charles to learn quickly and hit the ground running on new projects.
- Passionate about implementing correct solutions using best practices and established patterns for maintainable, performance-driven systems

TECHNICAL EXPERTISE

Objective-C, iOS, .NET, C#, ASP.NET, MVC, Ruby, Rails, Python, Android, Windows Phone, Azure, Parse, Sinatra, Node.js, Go, VB.NET, WCF, Flex, Visual Basic, XML, XSLT, XPath, XSL-FO, SOAP, REST, Calabash, OCUnit, Git, CocoaPods, PHP, LAMP, Perl, C/C++, Java, J2EE, JSP/Servlets, COM/DCOM/COM+, Microsoft SQL Server, mySQL, SQLBase, Access, Oracle, EDI, BizTalk, SharePoint, UML, Quick Test Pro, Microsoft Build, Ant, Gradle, Jenkins, Android Studio, Eclipse, Xcode, Concurrency, TDD, DDD, SOA

APP STORE

iTunes: MHQ, Lawnmower, Mapcraft, Yappem, AlphaMetrix; **Google Play**: MHQ, Lawnmower, Yappem

EXPERIENCE

Arc Worldwide / Leo Burnett February 2015 - present
Working with the digital arm of an international marketing giant as their first mobile solutions architect to bring their Fortune 50 client's first branded native mobile app into the Apple AppStore and Google Play Store. Providing architectural and development expertise as well as leading the framework and critical development portions of mobile apps for both Android and iOS concurrently. Helping drive changes in project management and delivery methodologies to better address needs of mobile application efforts across the suite of brands for multiple clients.

Leading full-scale re-architecture of the brand's back-end and web enterprise infrastructure utilizing microservices and containerized deployments, employing a variety of technologies including Java, Vert.X, Docker, SmartStack service discovery.

Lawnmower.io November 2014 – present
Providing technical leadership, direction, and development effort for a startup focusing on passive Bitcoin accumulation. The hybrid mobile application consists of native Today and Watch extension features as well and cross-platform push notifications using Ionic & Cordova. Architecting and implementing back-end services designed for rapid scaling and flexibility based on Postgres, Python, Flask, Redis and integrating with a multitude of third-party service providers for banking and Bitcoin network integration.

Accenture November 2014 – February 2015
Worked with developers in Argentina & Spain to deliver a cross-platform, hybrid mobile time & expense solution for worldwide enterprise deployment in Ionic & Cordova. Provided technical expertise in Android & iOS native application development as well as development work on Spring MVC back-end micro-service web services.

Amazon Lab126 May 2014 – October 2014
Software Development Engineer as part of the Phone, Dialer, Voicemail team of Amazon's Fire Phone. Primarily responsible for extending features and improving application responsiveness. Assisted in implementing team's CI build process general development engineering best practices. Spearheaded multi-vendor visual voicemail server support as the device was preparing for launch in UK and Germany.

Miniscus Group *August 2011 – present*

Working with the digital arm of an international marketing giant as their first mobile solutions architect to bring their Fortune 50 client's first branded native mobile app into the Apple AppStore and Google Play Store. Providing architectural and development expertise as well as leading the framework and critical development portions of mobile apps for both Android and iOS concurrently. Helping drive changes in project management and delivery methodologies to better address needs of mobile application efforts across the suite of brands for multiple clients.

Worked with developers in Argentina & Spain to deliver a cross-platform, hybrid mobile time & expense solution for worldwide enterprise deployment in Ionic & Cordova. Provided technical expertise in Android & iOS native application development as well as development work on Spring MVC back-end micro-service web services.

Developed ASP.NET MVC online service ticket management for a city's public works department that included ArcGIS hosted mapping and asset data. Additional frameworks used include Leaflet and Angular, Entity Framework, and WebAPI.

Development and architecture work across all supported platforms for the social networking platform "Yappem." Work involved development and architectural oversight in iOS (iPhone), Android, front-end web (angular.js) and back-end web and web services in C#/.net. Extensive mobile platform work on custom image manipulation in OpenGL using GPUImage library, including contributions to the Android port of this library. Implemented CI solution using Jenkins and custom build scripts. Extensive social network integration with Facebook, Twitter and Foursquare.

Built custom videos streaming app for iPhone & iPad to serve DRM protected training content to enterprise users. Included web-based player, content management, DRM via Amazon Web Services' CloudFront signed URLs and Flash Media Server DRM.

Developed and maintained a mobile extension to the hedge fund marketplace website in the form of native apps. Built and extended REST API layer in Microsoft Web API (WCF) and a mix of Entity Framework and direct stored procedure execution. Implemented cross platform push notification service written in C#. Native mobile app development targeted iOS (iPhone & iPad) and Android and was done using Xcode, Objective C, TestFlight, Flurry, Android ADK, Eclipse, SQLite. Multiple successful releases to AppStore and no rejections.

Constructed an online marketplace (social network) for hedge funds. Primary focus of site was to enable the connection of private investors to hedge fund managers and related service providers, as well as provide realtime trade and performance data for funds. Strict adherence to client's custom lifecycle framework and heavy use of stored procedures for all data writes, retrieval and business rule enforcement. C#, ASP.NET, SQL Server 2008.

Designed a built custom crime mapping portal for police department based on data imported from monthly county statistics. Full site management, design, development in Ruby on Rails, PostgreSQL, Leaflet mapping, PostGIS, Leaflet, ArcGIS, and Google Maps API.

Created a data portal for a multi-city, consolidated 911 dispatch center. Shared data documents were replaced with data-driven web pages to enhance functionality and provide faster access to critical information. Ruby on Rails 3.1, PostgreSQL, Amazon AWS.

Custom reporting and time management app for widely used time & expense tracking and billing site. This iOS app addressed pressing needs for functionality not available in the service's existing mobile app and mobile site offerings. Planned development includes Windows Phone and Android platforms. Objective C, iOS 5 & 6, XCode 4.

Senior developer responsible for design and construction of website build-outs using a proprietary markup framework based on SQL Server, ASP.NET, C#, jQuery. Also built a variety of data loaders and manipulation scripts to bring data over from other content management systems into the new web sites.

VOKAL Interactive *October 2012 – June 2013*
iOS Engineer responsible for architecture & development of a variety of native iOS & hybrid applications for VOKAL clients, while interacting closely with creative designers, project management, back-end developers. Ongoing mentoring of students participating in the Mobile Makers Academy in group and individual settings in order to expose the students to real world challenges and ensure their success in the course.

Defined client-side, cross-platform, mobile architecture for a large big-box retailer ahead of a very large implementation effort. Worked closely with chief architect/mobile strategist and server-side architect to develop a detailed, intent-driven architecture applicable to mobile web, iOS, and Android. Artifacts were built using UML 2.1.

Developed a fully custom mapping tileset viewer on iPhone and iPad for Minecraft world maps, and built an accompanying custom push notification server. In the first 5 days of release on AppStore, this app was installed on over 50,000 devices.

Developed a proof of concept iPad application for evidence viewing from files of a variety of formats. Implemented a REST wrapper in Microsoft Web API (WCF) to wrap the customer's legacy SOAP web service layer.

Architected a mobile iPhone front-end solution and back-end supporting API for a startup company through the discover phases and into early development, including innovative location based direction solution.

Maintained and extended location-aware iPhone photo application including integration with location services, Walgreens API for printing, Facebook and Twitter integration.

Developed native iOS application for iPhone & iPad that allows sharing of content and communication amongst educators worldwide for an educational startup. The intent was to build not just an application but a mobile platform that could be extended using custom built reusable components and relied heavily on highly custom interface components.

Built hybrid iPhone application for purchasing and redeeming restaurant gift certificates.

Geneca March 2002 – August 2011

Developing and extensive refactoring of a web based tool for Investment Consulting firm using ASP.NET, CLSA, WCF, jQuery, Component Art and Oracle.

Developing cross-platform HTML5/CSS3/jQuery Mobile solution for Azure cloud application monitoring system. Includes platform-specific native client interface for iPhone/iOS, Android, and Windows Phone.

Managed and led a team of developers in designing and building a cross-platform student information app for Apple iOS and Android mobile phone platforms. Responsible for all project management and all back-end service development in Ruby on Rails 3. Extensive client-side development in Xcode and Eclipse/ADK.

Architected an extensibility framework used in a high-load IIS web service which processes critical health monitoring device information. The framework was used to hand off data to an interop component written by a 3rd party to perform data analysis and flag potential concerns. Designed and implemented a distributed system with web-service front-end to process mobile device activation and deactivations.

Provided lead technical guidance as well as design & development expertise for a .NET WinForm application utilizing WCF to communicate with a Tandem mainframe back-end server.

Designed and implemented a PDF engine in .NET using the iTextSharp library to fill templates and produce a single file from multiple sources for a large insurance company. Lead the development and execution of load testing. Other technologies used include SQL Server 2005 and Visual Studio Team System 2008.

Acted as mentor and lead developer in the development of cross-industry, multiple client direct marketing platform which was utilized by the client to quickly and easily build out portals for the enrollment and management of marketing programs. Targeted industries were automotive and telecommunications. Technologies utilized included Ajax, C#, asp.net and SQL Server 2005, Adobe Flex, and Quick Test Pro. The delivery methodology was based on Geneca's "Getting Predictable" agile methodology and involved fast delivery of iterations in a mission-critical, high-visibility application.
Developed an HTML rendering and printing services on FreeBSD based on Bash & PHP5 to monitor a folder for system generated sales quotes and print them in batches for mail distribution.

Architected and developed a web-based economic forecasting tool for the retirement division of a major human resource consulting firm utilizing C#, Ajax, and Oracle. Data was collected and passed to a compiled Excel

spreadsheet for calculations. Office Web Components were then used to generate graphs for display in the web page. The tool was later enhanced with Ajax for a smoother, more responsive user experience. Also worked on a global valuation tool used by consultants preparing economic valuations for corporate benefit plans.
Ported ASP-Access based CRM web site to ASP-SQL Server site for world-wide rollout. Added functionality for extracting selected SQL Server tables and downloading them in an Access database. Then extended the CRM web site for complex layout of a report in PDF. Technology involved XML query results in SQL Server, XSLT and XSL-FO for PDF layout specification and file generation.

Led the object design and development of a collection of scheduling components, written in C#, for a real estate company looking for a home-grown alterative to Exchange.

For a large multi-branded, multi-lingual banking system, developed a .NET wrapper layer around web-service calls to the multiple sources of middleware as a means to isolate the redundancy requirements. Custom Attributes and tools were developed to allow developers to test and debug without access to the middleware, through the saving of and loading from XML flat files and to allow developers access to raw XML before serialization for faster loading into strongly-typed data sets.

Senior architect and lead developer of a productivity project tracking system for a large manufacturing company, used to track projected and actual savings and expenses resulting for productivity changes. Data entry screens collected information which was processed by a close-month routine written as a SQL Server stored procedure. The system utilized .NET, XML, XSL-FO for PDF file generation.

Completed analysis and design of a web-based survey report ordering system using UML for a large industrial psychology firm. All business logic was encapsulated in VB6 COM+ objects, returning XML to the ASP layer, which handled translating it through XSLT for presentation. The ordering was based on a complex matrix of business entities, represented through self-referencing tables in a SQL Server. To ease the complexity in the business layer a robust data provider was developed to communicate with the self-referencing table hierarchy.

Lead analyst and developer for as political lobbying website and email campaign management system which allowed for team building and publication of important issue and bills at state and federal levels. The application is targeted toward many organizations. Components include an independent, scalable email engine, personalized email generation including recipient's policy maker contact info, and website

Senior architect and designer of Geneca's Virtual Foundation product. Initially led the porting of the existing Virtual Foundation framework from ASP/VB to .NET. Project included instituting new methodologies and standards for object-oriented framework and content management. Architected new content management approach and extensive enhancements to the application framework. This product has since been the base of several high-profile, highly successful development initiatives.

At a large Human Resource Consulting client, worked as a senior Microsoft web programmer on multiple projects that required fast turn around, tight timelines, and flawless execution to meet dates. Finished projects early and making a large impact on the team. Technologies include ASP, Visual Basic, COM, XML and Oracle.

As Lead Developer, enhanced existing Excel spreadsheet using VBA and XML to provide rich functionality including external data saving, automatic updates over the intranet, data import/update over the intranet and error logging and reporting. Further extended existing functionality to include batch processing and developed several stand-alone utilities to aid in generation of supporting data files.

Projects 1995- 2002

FreeDrive (web based storage for consumers and businesses, sold to XDrive)
Senior Programmer responsible for mentoring junior developers, enforcing architecture, improving procedures, as well as implementing new solutions. Developed and maintained custom, high-performance ISAPI Extension and Filters to handle HTTP-based file uploads, security, and custom redirection. Implemented a SOAP layer to expose key functionality as Web Services to service providers to allow wireless and explorer-integrated access to the FreeDrive services and supporting outside developers in its use. Led initiative to automate B2B sign-up channel. Performed object modeling and design for re-architecture from a class-less to object-oriented, tiered architecture, including evaluation of a transition to .NET or J2EE.

moveline.com *(start-up from North American Van Lines…out of business)*
Moving company agents used moveline.com to manage the logistics of a business move for companies like Starbucks, McDonald's, etc. Architected and developed a BizTalk solution to handle XML and X.12 based EDI for the web spin-off of one of the nations largest transportation and logistics companies. Also led development of an n-tier DNA-based invoicing and payment processing system using Visual Basic, ASP, MTS and Windows2000.

RadioWave.com *(start-up from Motorola…out of business)*
On-line radio broadcasting and systems. Developed web-based players for high-visibility clients for streaming audio utilizing embedded Windows Media Player control and extensive DHTML interaction. Players were both HTML and Flash based and provided out-of-band coordination. Players developed include MSN Chat Radio, Alligator Records Radio, Artist Direct Radio, Rolling Stone Radio and several large radio stations. Architected the company's frameless, DHTML based player as well as the skin-able Flash-based player. Backend development included custom data caching solutions for a 14-server web farm and network of broadcast servers and audio feeds and using XML database queries and XSLT data transformations with a SQL Server 7.0 database.

WebExpos *(on-line tradeshow)*
Lead technical developer for an exposition company's internet spin-off. The system was extensible to handle a variety of show types with customized look and feel. The system was developed using ASP and VBScript to script COM controls and a SQL Server 7.0 database.

EarlybirdCapital.com *(Investment company)*
Maintained and enhanced a specialized investment company's ASP-based extranet. Development involved creation of content management tools and additional functionality including multimedia playback. Since the client used its own designers and layout staff, the architecture utilized a template system, and logical multi-tier model.

InvestPrivate.com *(Investment company)*
Developed a content creation and management system for a large investment site. Also designed and developed job posting and event calendar components of the site for both job/event maintenance and display.

Chat System *(Xceed, Inc)*
Performed all aspects of the development process, including architecture, analysis, design, and development of an interactive chat client in Java 1.2 utilizing AWT and Sockets. This system was a base application that was to be deployed to several clients. It is made up of a custom Java applet that communicates with a multi-threaded chat server written in Visual Basic over TCP/IP through sockets and custom datagrams. Additional features include instant messages, standard chat, user identity, and private chat rooms.

Message Board *(Xceed, Inc)*
Performed full development life-cycle process for the creation of a web-based message board utilizing Microsoft's ASP technology and SQL Server 7.0 stored procedures.

American Bar Association - Budget Templates Application
Completed all areas of analysis, design, development and deployment of an enterprise wide budget data collection intranet system which replaced a long, manual process of spreadsheet compilation. This DHTML intensive collection of ASP pages allowed the finance staff to decrease preparation time from 2 months to 1 week, and greatly improved accuracy and speed of budget completion and approval.

Rank This and **Competition Meter** *(Yesmail.com)*
Tuned and enhanced several PERL spiders and developed ASP-based web sites used to query search engines and analyze results to allow web marketing professionals better position themselves in the search engines, as well as targeting key Internet alliances with companies.

my.yesmail.com *(Yesmail.com)*
Performed key technical development of front-end web pages developed in ASP, as well as extensive business logic and database access objects in Visual Basic, for an Internet start-up. The entire system was developed very rapidly, yet maintained a superior quality level.

Merced Medical - Medical Supply Catalog
Developed an online catalog system for a major medical supply manufacturer, allowing hospitals to place quote requests online. ASP, JavaScript, and VBScript were used extensively on both client- and server-sides to optimize

performance and reliability. This system also facilitated the generation of updated paper-based catalogs through Office97 automation and VBA.

Wheels, Inc - Vehicle Ordering
Led the development of an ASP-based Internet system that allowed drivers to place orders for company-leased vehicles over the web. A collection of business objects, written in Visual C++ and Visual Basic, were used to access a Microsoft SQL Server database. Dynamic HTML (DHTML) was used extensively to handle complex client-side forms. Unique to this system was the requirement to accept credit cards for driver-paid options, however for risk-limitation, all capturing and processing was done at another site. This interchange was invisible to the user, and was handled by off-line custom HTTP protocol programming between the 2 web servers to ensure that the transactions occurring on two different servers on different disconnected networks would be failsafe.

Manpower - PowerBase
Performed technical analysis and development of a large-scale, object-oriented , 3-tier, client/server application. This application drives the daily operations of a Fortune 500 company and was written in Borland's Delphi 2.0. Data was stored on an Oracle 7.3 database and data access was performed by calling stored procedures through a custom wrapper for the Oracle Call Interface (OCI). In addition to development, also served as a Technical Team Lead, acting as a lead developer for a 10-member team.

Mitsubishi Electronics - Specification Wizard
Designed and developed a fully object-oriented collection of Wizards in Delphi 2.0 to generate pre-sales specifications as RTF documents. The user could customize the templates used for each specification type. Because the solution had to be small and useable without any installation program, the Borland Database Engine could not be used. As an alternative, a collection of components was developed to read information from custom flat files. This application was later ported to a series of Active Server Pages complete with DHTML running NT Server under IIS on for use on an Intranet. This Intranet was accessed with 4th generation browsers from Netscape and Microsoft.

Mitsubishi Electronics - UPS Monitor
Performed all analysis, design, and implementation of a mission-critical, Windows NT-based system for an international, Fortune 100 company. The system was required to communicate with the company's large-scale, 3-phase UPS systems via RS-232 serial ports. The status is monitored and presented to the user in real-time and logged to a Simple Network Management Protocol (SNMP) Management Information Base (MIB). Minor faults triggered notification to administrators via email, and severe faults triggered notification via pager and launched server shut-down routines. This object-oriented system was developed with C++ using Borland's Object Windows Library (OWL).

Harcourt Brace - Bar-review Preparation Software
Designed and implemented a Delphi 1.0 system for a Fortune 500 company providing training and self-testing solutions to law students. The multimedia application allows students to review test cases and take tests and see how well their responses would compare with current law practice. The application used a central Oracle database and local paradox tables. The project involved client/server computing and object-oriented design and programming. Later ported the Windows-based bar-review software to the Macintosh platform using Visual FoxPro for the Mac.

Ameritech - Compensation Administration System
Developed a Client/Server system, used by the management of a Fortune 100 company. The portion of a solution used by the compensation staff was a self-contained client/server application written in Visual Basic and was used to maintain data in a Sybase back-end. Database access was done through Intersolv's SequelLink ODBC and SQL-passthrough dynasets. At year-end, the data was accessed through a second, cross-platform application written in FoxPro for Windows and Macintosh through the SequelLink ODBC. This project involved object-oriented analysis, design, and development and made heavy use of client/server technology.

Medical Weight Management - Weight-loss Center Web Page
Led the development of an Internet system to present information about weight-loss programs to prospective customers and accept requests for more information. Users also had the ability to verify if their weight qualified them for various programs. Information gathered on the web pages was forwarded by a Delphi program to registered weight loss centers via fax and email. Common Gateway Interface (CGI) interaction was handled via custom developed Delphi object classes. Data was entered into an Oracle database and later accessed from a reporting service via standard Delphi controls.

Bacons Media - Media Research System

Developed several annual releases of a media research tool used to target advertisements. Essentially, this system was an advanced query tool written in Visual FoxPro for both Windows and Macintosh platforms. Multiple versions of the system were created for large-scale client/server use as well as slower desktop based use. This system was later ported to Active Server Page technology using VBScript on the server-side and JavaScript on the client-side.

Bacons Media - Macintosh Communications Library

As a portion of the media research application, developed a Shared Code Library using C++ CodeWarrior for the Macintosh to handle modem communications and ZMODEM file transfer protocol to upload files to a BBS in the central mailing house.

Dunn Systems - Web Server Monitor

Developed Delphi-based utility to monitor the status of remote web servers, by connecting via HTTP protocol and using Ping algorithm. Network administrators were notified via alpha numeric pager through the Simple Network Paging Protocol (SNPP).

Dunn Systems - EDI Link

Developed a base application in FoxPro 2.5 for DOS to interface between EDI trading software and SBT accounting software. This included integrating to retailers such as Kohl's, Kmart, Sears, Menards, Lowes, Meijers, and others. This application was designed and written as a base application, and was customized for use with different trading companies and to handle differences in business and accounting practices.

Ballard Healthcare - Personnel Availability System

Developed a personnel availability system that allowed users without a computer to communicate easily with a receptionist's computer through the office telephone system. By using Windows Telephony API (TAPI), the users were able to dial up the modem attached to the computer, interacted with a menu of voice prompts to update their availability status. This system was written with Borland C++ and the Object Window Library (OWL).

HONORS & AFFILIATIONS

member Upsilon Pi Epsilon Honor Society, Delta Chapter
member IEEE Computer Society
member Association of Computing Machinery (ACM)
member International Association of Software Architects (IASA)
member Illinois Technology Association

PERSONAL

Fluently speaks and writes Spanish.

EDUCATION

DePaul University, College of Digital Media & Computing, Chicago, Illinois *Present*
Master of Science Degree in Software Engineering, dual concentrations in Software Architecture & Software Development.

DeVry Institute of Technology, Addison, Illinois *June 1995*
Bachelor of Science Degree in Computer Information Systems

Geneca, Oakbrook Terrace, Illinois
In-service Training: Getting Predicible (SCRUM/Agile), Function Point Analysis, Risk Management, Systems Thinking, Information Architecture