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| Online Resume:  |     | <http://cochand.com/jeff/>  |       | [shorterResume.htm](http://cochand.com/jeff/shorterResume.htm)  |
| MS Word Doc download:  |     | [cochandResume.docx](http://cochand.com/jeff/cochandResume.docx)  |       | [cochandShorterResume.docx](http://cochand.com/jeff/cochandShorterResume.docx)  |

Objective
A contract position as a Senior Engineer, Lead Engineer, and/or System Architect in the design, development, and integration of computer systems. Will also consider well-matched permanent positions.

[Computer Proficiencies](#computer) | [Experience](#experience) | [Education](#education) | [Publications](#publications) | [Activities](#activities) | [Contract Preferences](#rate)

Particular Areas of Interest and Qualification

 Microsoft Windows & Web design & development, using SQL Server, .NET, IIS, ASP.NET, etc.

 Database Design & Development, including expertise in SQL Server, Oracle, Access, and Thunderstone Texis

 Java, AJAX, Eclipse, Swing, SWT, and C++ programming on Unix, Linux, and Windows platforms

 Design, Development, and Analysis of client, server, & web-based applications

 Image Processing, 3D Computer Graphics, and Robotics applications

Highlights of Qualifications

 Proven technical innovation and leadership, as contractor, consultant, and CTO

 Effective contributor and motivator in a team environment

 20+ years' experience as a highly skilled software developer

 Ability to apply technical knowledge and skills to a wide variety of applications

 Extensive ground-floor startup experience; equally comfortable in the Board Room & the Coding Cubicle

 Incorporated consultant with Technical Depth & Business Breadth

Computer Proficiencies

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| **Programming Languages**C#, C++, C, Thunderstone Vortex, Java, JavascriptAJAX, SWT, Swing, J#, HTML, CGI, Perl, jQueryVB, VB.NET, ASP.NET, Visual Basic, Fortran, PascalLisp \*Lisp, Prolog, RPG, Assembler  | **Operating Systems**Windows 7, 2008, 2003 Server, XP, 2000, NTLinux (Red Hat, Cent OS), Apache, TomcatSun Solaris, SGI IrixHP-UX, & others  |
| **Microsoft Technologies**Visual Studio .NET 2010 back to Visual Studio 6.0 SQL Server 2008 to 6.5, IIS 7.5 to IIS 1.0, .NET 4.0ASP.NET, ASP, VB.NET, VBScript, C#, ActiveX, ATLWPF, WCF, LINQ, Silverlight, COM, DCOM, MTSADO.NET Entity Framework (EF) 3.5 & 4, WF 4.0SharePoint Web Parts development and BCS data lists | **Databases**SQL Server, T-SQL, MS Access, SSRS & Crystal ReportsOracle 11g, PL/SQL, SybaseThunderstone Texis, Vortex Web Scripting, WebinatorDB admin, config, scripting, and stored procedure dev  |
| **Hardware**Personal ComputersSun, SGI, IBM RS/6000, HP/Apollo, Stardent WorkstationsConnection Machine, IBM PVS, Alliant FX8 SupercomputersPixar, E&S PS300, VAX 11/780, Symbolics and other oddballs  | **Software Development Tools**Microsoft Visual Studio, SQL Server Management StudioEclipse, WindowBuilder Pro, SWT Designer, Swing DesignerToad for Oracle, ObjectCenter, Aspose CellsSVN (Subversion), ClearCase, SourceSafe, SCCS |
| **3D Graphics Tools**AVS, AVS/Express, IRIS Explorer, IBM's Data ExplorerSGI's Graphics Language (GL), PV-WaveChapReyes (Renderman)Alias Modeling System, AutoCAD  | **Miscellaneous**VMware, Selenium IDE & RC, DotNetNuke (DNN), Ektron CMSMotif, Xt, X11, Siebel 2000, WhatsUp GoldAgile, SDLC, QSR, Netscape Commerce ServerHubs, Switches, & Network Interface Cards  |

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Professional Experience

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| **2012** [Affiliated Managers Group](#amg)[Teamstudio](#teamstudio) | **2011** [One to One](#oneToOne)[Teamstudio](#teamstudio)[Dartmouth Journal Svcs](#djs) | **2010** [Proventys Medical](#proventys)[Teamstudio](#teamstudio)[Avenue100](#avenue100) | **2009** [ModelGolf](#modelgolf) | **2008** [Aware](#aware) |
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| **2007** [PMLP](#pmlp) | **2006** [Sensitech](#sensitech)[Biscom](#biscom) | **2005** [Riso](#riso)[Meetinghouse](#meetinghouse)[SG Industries](#sgi) | **2004** [OEMsTrade](#oemstrade)[Business Forecast Systems](#bfs)[FastPenny](#fastpenny) | **2003** [AppRiver](#appriver)[Woodstock](#woodstock) |
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| **2002** [XL Tech](#xltech) | **2001** [Caradas Inc.](#caradas)[S&H Greenpoints](#greenpoints) | **2000** [Project Oasis](#oasis)[TrueAdvantage](#ta)[Sir Speedy](#sirspeedy) | **1999** [Outsoft](#outsoft)[Gotuit](#gotuit)[Omtool](#omtool)[SAIC](#saic) | **1998** [RITI](#riti)[Think New Ideas](#think)[Genetics Inst](#genetics)[NetValu](#netvalu)[EBSCO](#ebsco) |
|  |  |  |  |  |
| **1997** [Personal Audio](#pa) | **1996** [Fidelity](#fidelity2)[Nynex](#nynex) | **1995** [AVS](#avs) | **1994** [Fidelity](#fidelity) | **1994 -1988** [TASC](#tasc) |

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| cochand.com  |

**Financial Services applications implemented using .NET, SQL Server, SSRS, EF 4, and SharePoint Web Parts**

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| Aug, 11 - Present  | Win, Web, & SharePoint developer  | [Back to Top](#top)  |
| Affiliated Managers Group, Inc.  | Beverly, MA  | [Back to Experience](#experience)  |

One of a cohesive seven member development team that designs and develops the applications that support the highly successful AMG financial services operations. This includes a SQL Server based Affiliate reporting system, its web and windows front ends, SSRS, Crystal, and Aspose Cells reports, Excel VBA financial apps, and the creation of AMG’s SharePoint intranet. Implemented SharePoint Web Parts for custom applications that communicate with the SQL Server database via WCF web services, BCS, and business and data layers, which I also helped design and implement using Entity Framework 4. Implemented UI using Telerik RadGrid after reviewing Infragistics WebDataGrid and the DevExpress ASPxGridView. Created a bulletin board forum using Website Toolbox, Invision, Vanilla Forums, and BoardHost. I also used the Ektron content management system to support updates to [AMG’s public website](http://www.amg.com/).

**Agile .NET UI/SQL web-based (SaaS) Social Messaging platform for Facebook & Twitter**

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| Apr, 11 - Aug, 11  | .NET Agile developer  | [Back to Top](#top)  |
| One to One (Connect), Inc.  | Charlestown, MA  | [Back to Experience](#experience)  |

As a member of a 10 person Agile product development and QA team, I helped implement several releases of [MessageMaker Social](http://www.messagemaker.com/social/features/). MessageMaker is a SocialCRM that allows corporations to engage their customers faster and more effectively than the standard single-page-based interfaces of Facebook and Twitter. Our team has built a truly object orientated, multi layered, extensible system using Visual Studio 2010, jQuery, SQL Server, and SVN that helps marketers manage and deploy their social media messaging strategy. The SaaS system is used daily by customers, with new releases deployed monthly through development, QA, staging, and live load-balanced db, web, & app servers. Implemented in .NET 4.0, IIS 7.5, and SQL Server 2008, our system employs object oriented techniques in a multi-tiered solution that includes UI aspx/cs/javascript/handlers/mappers, business operations, data access, and db layers. I was one of five Agile developers that designed and implemented components in all layers of the system, gaining oo, .NET csharp (C#), jQuery, and SQL stored procedure development experience. Our partially remote but tight team held daily scrums in 4 week sprints using skype, google docs, virtual whiteboards, and good old fashioned email to maintain daily cohesiveness.

**Corporate website updating, rehosting, & SEO**

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| Apr, 10 - Present  | Web Dev & Search Engine Optimizer  | [Back to Top](#top)  |
| Teamstudio, Inc.  | Beverly, MA  | [Back to Experience](#experience)  |

Implemented the latest version of <http://teamstudio.com> using DotNetNuke (DNN). Administered all aspects of the DotNetNuke site, installing, backing up, recovering, host & admin privileges, customizing the skin and .ascx pages. Helped localize the 75 pages into a 4 language multilingual site using Apollo’s MLHTML module. Prior to that, I combined two existing sites, a Classic ASP and an ASP.NET eCommerce site, into <http://www.teamstudio.com>. Migrated Access 2000 to SQL Server 2008, updated site search to Google Site Search, transferred existing site to a new hosting provider cutting monthly costs by 75% while increasing performance. Resolved all the porting issues required to bring the site up to VS 2008, SQL Server 2008, and .NET Framework 3.5. Internationalization of site in multiple languages: English, French, German, and Japanese. Search Engine Optimization for improved ranking in organic search, local search, and social media networking.

**Designed & Implemented a .NET 4.0 workflow publishing system**

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| Jan, 11 - Mar, 11  | 3-tier .NET designer & developer  | [Back to Top](#top)  |
| Dartmouth Journal Services  | Waterbury, VT  | [Back to Experience](#experience)  |

DJS coordinates the creation of articles that are published in technical journals. DJS brings together authors, publishers, content, and imagery while managing the workflow production of journal article. As a member of the initial Windows .NET development team, I implemented the core of a web services based web application that will become the workflow management tool for DJS’ article and document management. The development team iterated through Cycles of a hybrid Agile Just In Time (JIT) approach and used the latest Windows technology: .NET 4.0, IIS 7.5, SQL Server 2008, Visual Studio 2010, and Windows Workflow Foundation (WF) .NET 4. My initial responsibilities were to build a couple of the web ASP.NET ascx/aspx UI pages, get Subversion (SVN) up & running, and create an efficient VS 2010 & IIS 7.5 deployment environment. I then moved on to design & implement the two lower tiers; the Business Logic Layer (BLL) and the Data Access Layer (DAL) using the techniques described at <http://www.asp.net/entity-framework/tutorials>. I implemented several CRUD basics using a Repository Interface against the latest Entity Framework (EF 4.0) Object Context based on a Model First SQL Server schema achieving Persistence Ignorance. We decided that we did not need POCO or T4 support as we are wed to SQL Server and do not plan on unit testing. After handing this off to others who implemented all the necessary CRUD, I moved on to using Windows Workflow Foundation 4.0 to implement the fundamental document workflow required for DJS. I implemented the fundamental Workflow Foundation as a Web Service, allowing it to communicate with everything from a command line DOS app to the DJS website.

**Implemented a soon-to-be FDA-approved software medical device**

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| Jul, 10 - Dec, 10  | Java & Oracle developer  | [Back to Top](#top)  |
| Proventys  | Newton, MA  | [Back to Experience](#experience)  |

Inherited, supported, and enhanced a Java & Oracle web application. The web app is classified as a medical device and is the pre FDA approval stage. The system assists doctors in prescribing growth factor to combat febrile neutropenia based on a proprietary algorithm using the First DataBank & a custom drug regimen catalog. The system runs on 64 bit RHEL 5.4 and was built using Java 1.6, Apache 2.2.3, Tomcat 5, and Oracle 11g. My primary responsibilities were coding, design, and build details of the Oracle 11g database schema, stored procedures, and data access layer, as well as the Java middle tier, while working within the (attempted) Agile Quality System Regulations (QSR) Software Design Life Cycle (SDLC). Toad for Oracle and Eclipse were the primary tools I used. I also enhanced the custom Selenium IDE test suite code and served as the system administrator of the Red Hat Enterprise Linux (RHEL), Cent OS, and VMware machines both locally and remotely in the locked down datacenters.

**[http://www.GetTheJob.com](http://www.getthejob.com" \t "_blank) website transition**

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| Feb, 10 - May, 10  | Website engineer  | [Back to Top](#top)  |
| Avenue100 Media Solns  | Woburn, MA  | [Back to Experience](#experience)  |

Assumed ownership of an ASP.NET website ([http://www.GetTheJob.com](http://www.getthejob.com)) for a Linux/Apache shop that had purchased GetTheJob but didn't know Visual Studio, ASP.NET, or SQL Server. Figured out how the entire site worked, how to build and deploy it, made the requested modifications, and turned it back over to Avenue100. Created a Lightbox for login, locked down the site so that detailed job data links were secure behind login, eliminated 90% of superfluous bot traffic, created a publish and deploy procedure for the entire site, and generated complete documentation to transition the project to future developers.

**CTO responsible for all technology at re-startup, ModelGolf**

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| Jul, 08 - Feb, 10  | Chief Technology Officer  | [Back to Top](#top)  |
| ModelGolf, LLC  | Orlando, FL  | [Back to Experience](#experience)  |

Responsible for all technical aspects: database development, website dev, purchasing, strategy, design, deploy, end user systems, etc, etc. Built a complex WinForms application in VS 2008. Built the entire [ModelGolf.com](http://bluelobstercreative.com/modelgolf) site in C# ASP.NET 3.5, including live interaction with 50 systems in the field running the WinForms app. Reverse engineered the algorithm that incorporates 150 professional golf swings into the baseline model to which all ModelGolf students taking lessons are graphically compared.

**.NET portable micro app on hardened device**

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| Nov, 07 - Jul, 08  | C# & SQL Server developer  | [Back to Top](#top)  |
| Aware, Inc.  | Bedford, MA  | [Back to Experience](#experience)  |

Designed, implemented, and delivered [SIIMON](http://www.biometrics.dod.mil/newsletter/issues/2008/Jan/v4issue1_pm.html), the first version of a military tactical biometrics (iris, fingerprint, photograph, collateral info) collection system for the DoD. Implemented on a hardened ultra mobile touchscreen PC, successfully delivered, and the Navy is now moving forward to deploy version 3 of this system. Implemented a true three tier (UI, middle, database) system in C#, .NET, WinForms, VS 2005, ADO.NET, T-SQL, and SQL Server 2005.

**C# ASP.NET web app & SQL Server 2008 database call logging system**

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| Jun, 07 - Present  | ASP.NET & SQL Server developer  | [Back to Top](#top)  |
| Peabody Municipal Light Plant  | Peabody, MA  | [Back to Experience](#experience)  |

Created a C# ASP.NET Web app that dispatchers use to log calls and trouble tickets for the Peabody Municipal Light Plant. It replaces a DOS-based app allowing dispatchers and managers to enter, monitor, and review trouble tickets related to the operation of the plant. Implemented using automatic data binding whenever possible and customized pager settings for reporting. I've added enhancements as requested over the years. SQL Server Express 2005. VS 2008.

**C# Windows app that produces Crystal Reports Certificates**

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| Aug, 06 - Apr, 08  | .NET UI and Crystal Reports developer  | [Back to Top](#top)  |
| Sensitech  | Beverly, MA  | [Back to Experience](#experience)  |

Developed a C# .NET Windows Forms application that generates [Certificates](http://sensitech.com/certifications/index.html) verifying the accuracy of Sensitech temperature and humidity monitors. The application allows the user to request reports for specific monitors, gathers data from SQL Server, parses XML and text files, and then presents this information to the user. The user then has the option to print Certificates containing this information, which are generated as Crystal Reports via an XSD-generated DataSet.

**SQL Server query optimizations**

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| May, 06 - Jun, 06  | Java & SQL Server developer  | [Back to Top](#top)  |
| Biscom, Inc.  | Chelmsford, MA  | [Back to Experience](#experience)  |

Optimized SQL Server queries that are called from Java code. The most complicated queries are now down to approximately 3 seconds from the original 1 ½ minutes. This was accomplished by evaluating the application, determining what calculations were most appropriate in Java versus SQL Server stored procedures, and optimizing the stored procedures.

**VB.NET Software for Educators to create and analyze Assessments (high school tests)**

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| Sep, 05 - Apr, 06  | VB.NET & SQL Server developer  | [Back to Top](#top)  |
| Riso, Inc.  | Danvers, MA  | [Back to Experience](#experience)  |

Helped design and implement the second generation of [Riso Assessment](http://rpbsystemsandservices.com/Education.html), a Windows Forms VB.NET application used mainly by high school teachers to create and analyze tests and quizzes. The application generates test workbooks and answer sheets, scans in the bubble forms, analyzes the results, and produces reports summarizing those results. I designed and built a creative SQL Server database and the corresponding VB.NET user interface that allows any hierarchical State Framework to be entered into the system and then all Items (questions, answers, and distractors) to be mapped to that Framework.

**Java Eclipse SWT & Swing GUIs**

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| Jun, 05 - Sep, 05  | Java UI developer  | [Back to Top](#top)  |
| Meetinghouse Data Comm  | Portsmouth, NH  | [Back to Experience](#experience)  |

Created both SWT and Swing versions of a Java GUI for a networking application using Eclipse and WindowBuilder Pro (SWT Designer and Swing Designer). Navigation through the application was implemented using a tree on the left hand side that displayed various layouts and controls on the right hand side.

**SEO Web site ranking of sgidirect.com on the first page of Google search results**

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| Jul, 04 - Jun, 05  | System Consultant / Software Developer  | [Back to Top](#top)  |
| SG Industries  | Beverly, MA  | [Back to Experience](#experience)  |

Modified <http://sgidirect.com> so that it appears on the first page of Google search results. Searches in Google for electronic components are directed to the SGI website via the Search Engine Optimization software. I automated the entire process, starting with the creation of an sgidirect.com sub-site where SGI employees upload 10,000 new parts daily. These parts are automatically entered into a SQL Server 2000 database, duplicates removed, and improperly named parts cleaned. A custom C# algorithm is then executed that reads through the database of part numbers and automatically generates web site pages and incorporates them into sgidirect.com. The content of these pages is generated in a manner that takes the Google PageRank algorithm into account, resulting in the automatically generated pages being highly ranked in Google, and directing significantly more traffic to <http://sgidirect.com>.

**Wrote C# wrapper class to provide access to an underlying dll**

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| Jun, 04 - Jul, 04  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Business Forecast Systems, Inc.  | Belmont, MA  | [Back to Experience](#experience)  |

BFS, Inc. clients sometimes integrate [Forecast Pro](http://www.forecastpro.com/products/overview/index.htm) into C# .NET applications. I wrote a C# wrapper class around the C++ Forecast Pro dll (fpwlib.dll) so that it can be included in these C# applications. The C# wrapper is available via one "using" statement so that the dll can be loaded and unloaded and the internal C++ function calls and returns are accessible.

**Built sample client websites, a SQL Server database, and XML Web Services that served as the FastPenny infrastructure**

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| Jul, 03 - Jan, 04  | System Consultant / Software Developer  | [Back to Top](#top)  |
| FastPenny  | Lexington, MA  | [Back to Experience](#experience)  |

As a startup, FastPenny created an innovative approach to web micropayments between consumers and merchants. Using the seamless FastPenny Wallet, consumers could pay for their web purchases by redeeming FastPenny coins at FastPenny enabled merchants. We built an entire system that made this happen, allowing consumers to install an online wallet that was funded via a coin mint running on a FastPenny server. Consumers could then shop at sample ASP.NET and ASP merchant web sites. XML Payment Requests (PRQs) were created on the merchant sites, validated by the consumer wallet, and consumed by the web service application running on the FastPenny server. Creative approaches were implemented using HTTP\_ACCEPT\_LANGUAGE to indicate the presence of a FastPenny wallet, recognition of the PRQ format, and two-way communication with the server.

**Real-time screen scraping of 40 electronic component websites**

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| Mar, 03 - Mar, 05  | System Consultant / Software Developer  | [Back to Top](#top)  |
| OEMsTrade Inc.  | St. Petersburg, FL  | [Back to Experience](#experience)  |

Wrote Thunderstone Vortex scripts within an asp website ([http://oemstrade.com](http://www.oemstrade.com)) that allows the user to search for electronic components based on their part numbers. In real time, 40 websites are searched in parallel using custom built Vortex code. The results are presented to the user as soon as they become available. In addition, I built a much improved website with additional features, using ASP.NET and a SQL Server database that tracks registered users and their searches. I have been responsible for design, implementation, and hosting of OEMsTrade.com. For marketing reasons, OEMsTrade decided to not roll out the new site.

**Created a user hierarchy in Thunderstone's dowalk, webinatoradmin, and search Webinator Vortex scripts**

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| Apr, 03 - May, 03  | System Consultant / Software Developer  | [Back to Top](#top)  |
| AppRiver LLC  | Gulf Breeze, FL  | [Back to Experience](#experience)  |

Designed and implemented modifications to Thunderstone Webinator Vortex scripts that allow Thunderstone administrators to define users as either administrators, or users with authority limited to walking and searching websites. This included creating custom Texis tables and automatically associating users with specific profiles. In addition, I wrote code to optionally output the results in XML format, modified the dowalk and search User Interface, and provided ODBC access to the data.

**Developer of a financial management intranet application**

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| Jan, 03 - Apr, 03  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Woodstock Corporation  | Boston, MA  | [Back to Experience](#experience)  |

Implemented ClientSoft for the investment management firm, Woodstock Corporation. ClientSoft is an intranet application used internally by Woodstock employees to organize the financial accounts that Woodstock manages. The system is a Microsoft IIS Active Server Pages application running against a Microsoft Access database. A prototype of the follow on to ClientSoft, WealthCascade, is being implemented using C# and .NET technology.

**Sole creator of GEDGAR, a web-walking system that retrieves and classifies worldwide corporate financial information**

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| Mar, 02 - Jan, 05  | System Consultant / Software Developer  | [Back to Top](#top)  |
| XL Technology Services Ltd.  | Co. Clare, Ireland  | [Back to Experience](#experience)  |

Worked with an entrepreneur from Ireland to develop GEDGAR, a Global version of EDGAR, that retrieves all sorts of financial information and documents associated with corporations that are publicly traded on all worldwide stock markets. Initially I worked with a team of Indian developers, but the founder of XL Technology decided that it would be more efficient for me develop the entire system myself. I built web-walking software that retrieves financial documents and allows them to be searched using natural language queries. I implemented the system using Thunderstone's Texis database and their Vortex scripting language. The system executes a customized version of the Vortex dowalk script, populates the Texis database, and transfers data back and forth between Texis and a SQL Server database that I designed and built. The system is deployed on a Microsoft Windows platform on co-located server at an ISP.

**Designed & implemented a Smart Visa Card Credential Management System**

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| Aug, 01 - Mar, 02  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Caradas, Inc.  | Weymouth, MA  | [Back to Experience](#experience)  |

Participated as a team member to help roll out a Smart Visa Card application for a major department store. The project was spec'd out when I was called in and I helped design a Credential Management System. I then implemented the CMS that tracked the status of cardholder accounts and helped rectify them with Chip Interface Device orders, Smart Visa Access credentials, and other CMS features. CMS was implemented on a Windows 2000 platform. Most of the implementation work involved SQL Server 2000 DTS package development. I used SQLXML2.0 to bulk load input interface feeds. Errors were caught, audited, and XML acknowledgement files generated so that the all interface data arriving from other companies could be validated. This system runs lights out, 24x7, in secure mode, thus proper scheduling of processes and robust error recovery and encryption was necessary.

**Special Projects developer on large Windows/Unix web app that integrated 7x24 retail store components**

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| Jul, 00 - Jul, 01  | System Consultant / Software Developer  | [Back to Top](#top)  |
| S&H Greenpoints  | Salem, MA  | [Back to Experience](#experience)  |

Helping reincarnate S&H Greenstamps, I worked with Greenpoints and Sapient personnel to build, support, and enhance the second generation of <http://www.greenpoints.com>. My duties varied widely, including cleansing and enhancing the SQL Server 7.0 and Sybase databases, debugging MTS dlls, designing the Windows 2000/Commerce Server 2000 based-site, and helping to enhance the Greenpoints Customer Care Center. Supporting a rapidly written, relatively large database (50+ GB) application in a 7x24 production environment, remotely hosted at Genuity, was a challenging learning experience. The system integrates a real time retail grocery store application, with a Unix Sybase database, and an SQL Server web site. Maintaining database integrity, via replication and other techniques, was one area of this project requiring frequent analysis and enhancement. With the help of MCS from the Waltham Microsoft Technology Center, we designed the new system for reliability and scalability using Windows 2000, SQL Server 2000, Commerce Server 2000, BizTalk Server 2000, and Application Center 2000.

**Siebel COM Automation Server Developer**

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| May, 00 - Aug, 00  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Project Oasis  | San Francisco, CA  | [Back to Experience](#experience)  |

Designed and implemented a system to monitor the execution status of Siebel 2000 Components. This system is written in VC++ and Visual Basic, using the brand new Siebel 2000 COM Automation Server API. Written as an NT Service, the system monitors the status of the Siebel Components via the COM API, reports these statuses to WhatsUp Gold via the WhatsUp Gold COM API, and automatically restarts the Siebel Components that have crashed. I also organized, scheduled, and documented the project, while participating with and directing the small team of developers.

**Sole developer of Thunderstone-based Web Crawling utility**

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| Dec, 99 - May, 00  | System Consultant / Software Developer  | [Back to Top](#top)  |
| TrueAdvantage, Inc.  | MA  | [Back to Experience](#experience)  |

Designed, implemented, and automated a system to crawl web sites containing RFPs, match the RFPs to qualified sellers, and display those matches on <http://www.trueadvantage.com>. I recommended & purchased the Thunderstone Texis database and Vortex web scripting tools and used them to crawl and match appropriate RFPs on publicly available web pages. I created a custom Texis database, populated it using gw, and culled non-matching RFPs using custom Vortex scripts. This was all automated using DOS batch files, extracted from the Texis database with a vortex script, and transferred to a SQL Server 7.0 database using bcp (bulk copy).

**Designed & developed a simple Print Job Management web site**

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| May, 00 - May, 00  | Designer & Developer  | [Back to Top](#top)  |
| Sir Speedy  | Greenville, SC  | [Back to Experience](#experience)  |

Quickly designed and built a simple web site that allows Sir Speedy clients the online ability to view, modify, and re-order Print Jobs. Client information is kept in a MS Access database and is presented to the client via a web browser. The client can modify the data and generate a new order. This work was done remotely and completed in only 20 hours.

**Incorporated a startup, Managed projects, and Ran all aspects of the new company**

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| Mar, 99 - Mar,00  | Co-Founder, CTO, and President  | [Back to Top](#top)  |
| Outsoft Development Group, Inc.  | Manchester-by-the-Sea, MA  | [Back to Experience](#experience)  |

Co-founded a company with a partner. Recruited, hired, and managed a staff of eight people. Managed five projects and helped the developers solve the difficult design and development issues. Organized most aspects of the business. I wrote proposals and won over $300,000 in new contracts. Due to our failure to make the product side of the business materialize, I shut down the company.

**Participant on the Conceptualization, Design, & Development Team for SongCatcher**

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| Jul, 99 - Nov,99  | Concept, Design, & Development  | [Back to Top](#top)  |
| Gotuit Media, Inc.  | Arlington, MA  | [Back to Experience](#experience)  |

I worked with a developer from my company to help [Gotuit](http://gotuit.com/), a five-person startup company, design and implement a prototype of their SongCatcher product. SongCatcher is a VC++, MFC, COM based application that downloads and plays MP3 audio over the web. I participated in the conceptualization and design of the product, and assisted the developer as necessary.

**Key Designer and Implementer of WebCenter**

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| Jan, 99 - Dec, 99  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Omtool Ltd, Inc.  | Salem, NH  | [Back to Experience](#experience)  |

Designed and implemented a complete NT Server, IIS, ASP, SQL Server web application for the registration and licensing of all of Omtool's software products. This system is a classic NT Web application available at <http://www.omtool.com>. Proceeded to serve as a consultant for several other web-based SQL Server 7.0 applications for the Marketing and Engineering departments at Omtool.

**Principle developer and technical focal point for E-Mall**

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| Aug, 98 - Jan, 99  | Technical Lead / Software Developer  | [Back to Top](#top)  |
| SAIC  | Wakefield, MA  | [Back to Experience](#experience)  |

Organized, developed, and delivered the solution for the pilot version of E-Mall, an Electronic Commerce procurement system spearheaded by the Commonwealth of Massachusetts. I was called in six weeks before Release 1 of the highly visible E-Mall project was due and rapidly coordinated all technical aspects of the project, while developing the majority of the ASP and SQL Server code. This code served as a wrapper around the Intelisys Enterprise electronic procurement system. Release 1 was delivered three days early, at which time I proceeded to work on Release 2.

**Developer of Visual C++, dll, MFC image processing tools**

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| July, 98 - Aug, 98  | System Consultant / Software Developer  | [Back to Top](#top)  |
| RITI  | Reading, MA  | [Back to Experience](#experience)  |

Developed a series of application programs that assist junior software developers in rapidly developing image processing applications. An MFC Visual C++ application serializes image display options via an MFC extension dll. Another MFC application uses Caris++ to load the serialized values and provide image display capabilities via COM exposed functions.

**Developer of an internet Customer Service application**

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| June, 98 - July, 98  | Software Developer  | [Back to Top](#top)  |
| Think New Ideas  | Stoneham, MA  | [Back to Experience](#experience)  |

Developed a Customer Service web application that allows users of EMC software products to register the products they own via the web. I wrote the majority of the ASP code for the application using VBScript and some JavaScript. The ASP code connected to an NT Oracle database via ADO database connections. The application recognizes users by way of cookies, validates the data they enter, automatically sends them confirmation email, and allows them to download updates to their software products.

**Designer and developer of an intranet web database application**

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| March, 98 - June, 98  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Genetics Institute  | Cambridge, MA  | [Back to Experience](#experience)  |

After working with the users of an existing Material Request application, I wrote a Requirements Document, created a Project Plan, and implemented the initial phase of an entirely new Materials Request computer system. This system tracks the requests, filling, shipment, and inventory of drugs, chemicals, and genetic material that Genetics Institute shares with research collaborators. The system is implemented as ASP pages with embedded JavaScript, served via NT Server and IIS. Template MS Word documents are merged with material request data to produce customized cover letters and legal agreements. Via an ADO database connection, the web site connects to a database I designed that contains several interrelated tables containing 25,000 material requests. The database has been in both MS Access and SQL Server. Additionally, my responsibilities included writing a Visual C++ program to extract the records from the archaic non-relational TRIP database and dump them to a format that more modern databases can read.

**Designer and developer of web applications**

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| Jan, 98 - Aug, 98  | System Consultant / Software Developer  | [Back to Top](#top)  |
| NetValu  | Stoneham, MA  | [Back to Experience](#experience)  |

Thaddeus Bouchard, the Founder of NetValu, and I worked together as a two person startup in an attempt to create a successful business based on personalizing web sites. By combining our own customized software and web development expertise with tools such as Site Server 3.0 and Eprise Participant Server, we delivered on a couple small projects, but abandoned our plans due to the uncertainty of steady work. We did however develop some useful ASP pages and Java applets, while gaining some experience in the aforementioned tools.

**Designer and developer of web-based data retrieval applications**

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| May, 97 - Jan, 98  | System Consultant / Dev Leader  | [Back to Top](#top)  |
| EBSCO Publishing  | Ipswich, MA  | [Back to Experience](#experience)  |

After coming to EBSCO to participate in their Unix versus NT decisions and work on their Java Medline application, I was appointed Development Leader for EBSCOhost Web 3.0. I assisted EBSCO in creating Requirements and Design Documents for Web 3.0. The design included the use of Microsoft’s Transaction Server, SQL Server, IIS, and components of Site Server, specifically Personalization Server and some of the Site Management and Analysis tools. The design incorporated the use of EBSCO’s Web Toolkit, based on ActiveX controls accessed via Active Server Pages (ASP). I developed prototype COM / MTS code based on a potential three-tier architecture for Web 3.0. The implementation of the Web 3.0 design was delayed in order to focus on getting EBSCOhost Web 2.0 out to customers immediately. At that point, I contributed to EBSCOhost Web 2.0, writing Visual C++ code that parsed HTML template files and served them dynamically to EBSCO Web customers via an NT to Unix gateway.

**Principal contributor at a five person startup company**

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| Aug, 96 - May, 97  | Software Developer / Project Leader  | [Back to Top](#top)  |
| Personal Audio, Inc.  | Methuen, MA  | [Back to Experience](#experience)  |

Served as Project Leader, and one of three principal designers & developers, of a personalized, consumer-oriented audio delivery system. Similar to Audio Books, or Books-on-Tape, we conceived of and created Magazines-On-Tape. I helped create a system that allowed readers to digitize magazine articles and enter them into a database. We also created the tools necessary to enter customer listening requests and digitally produce unique tapes corresponding to each customer’s requests. The system consisted of PC audio input stations, a SQL Server database, and record stations containing four sound cards and eight cassette decks each. The server was a 500 MHz DEC Alpha running NT 4.0 and the development was done in Visual C++ and Visual Basic on NT 4.0 Intel 386 workstations. The record stations ran Win95 and the entire system was connected via 100 Mb switches fed by five NICs on the Alpha.

**Developer of Fidelity’s Intranet-based Einstein Organizational Report**

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| Jun, 96 - Sept, 96  | System Consultant / Dev Leader  | [Back to Top](#top)  |
| Fidelity Investments  | Boston, MA  | [Back to Experience](#experience)  |

Worked with Financial Analysts and a Graphic Designer to create the HTML based Einstein Organizational Report. On their desktop PC’s, Fidelity management use Einstein to view numerous business critical statistics within Fidelity. Developed on Intel 386 PC’s, the entire system runs on Fidelity’s UNIX-based intranet in HTML, using CGI Perl to manage user selections and display Adobe Photoshop pdf files.

**System developer on the BigYellow web server project**

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| Jan, 96 - May, 96  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Nynex Information Resources  | Middleton, MA  | [Back to Experience](#experience)  |

BigYellow is the Nynex’s Yellow Page WWW server. My efforts were devoted towards developing the next generation of BigYellow, including software development in Java and evaluation of hardware and databases suitable for accessing 16 million YP listings. I wrote Java applications that gather information from Yellow Page advertisers and store that information in an Oracle database. The applications construct a Java GUI and call native methods that were an API to the Oracle database in anticipation of a functional JDBC. I also benchmarked some of our concepts on a 70GB, two Data Vault, SGI Challenge machine containing YP data in a Thunderstone database.

**Software developer of a News and Email textual search system**

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| Jul, 95 - Jun, 96  | System Consultant / Software Developer  | [Back to Top](#top)  |
| REACH Information  | Lexington, MA  | [Back to Experience](#experience)  |

As the sole software developer for REACH Information, I was responsible for developing a program that allowed the user to search news groups and email messages for information of interest. The program queried a Thunderstone TEXIS database, which is particularly well suited for storing and querying textual information, via Thunderstone's C Metamorph API. The information returned from the query was presented to the user as an HTML document, for review on a variety of platforms.

**Independent Consultant assisting AVS customers with AVS/Express software development projects**

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| Nov, 94 - Dec, 95  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Advanced Visual Systems, Inc.  | Waltham, MA  | [Back to Experience](#experience)  |

System design and software development of numerous high-end 3D graphics applications in the financial, scientific, and defense communities, including overseas customers. All of the work was centered on AVS/Express, which is an object-oriented Visual Programming Environment, allowing users to interactively assemble programming modules into an algorithm. I developed a Data Mining application which allows home mortgage lenders to track industry information, a visual programming approach to Finite Element Algorithm development, and a simulation and control system for very large manufacturing processes. Much of the work involved 3D graphics algorithm development, database management, and SQL querying, with 90% of the code written in C++ on UNIX platforms. Frequently, I was responsible for all aspects of the project, including proposal generation, system design, scheduling, and delivery.

**Chief consultant on the Correspondent Risk Management project**

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| Mar, 94 - Dec, 94  | System Consultant / Software Developer  | [Back to Top](#top)  |
| Fidelity Investments  | Boston, MA  | [Back to Experience](#experience)  |

The CRM System monitors the financial health of Fidelity correspondents (customers) throughout the United States. The system consolidates correspondent data and allows Risk Management to proactively monitor correspondent risk. The UNIX based system provides Risk Managers the ability to monitor correspondent status via a Motif interface designed to fit the Risk Mangers’ needs. Correspondent data is downloaded daily from a mainframe to the CRM Sybase database hosted on a Sun workstation. My responsibilities included system design, system development in C++ using Motif and Sybase, and system delivery and installation. I continued to work with the Risk Managers to further define their needs, while enhancing CRM for Release 2.0 and future releases. Currently, CRM is at version 7.0, and is still based on my initial design and development.

**Software developer / system engineer on numerous image processing and computer graphics projects**

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| 1988 - 1994  | Imaging and Graphics Software Engineer  | [Back to Top](#top)  |
| TASC  | Reading, MA  | [Back to Experience](#experience)  |

Most often my responsibilities revolved around system and software development. I often worked on projects from concept through delivery, and was typically involved in proposal writing, system design, project management, software implementation, hardware integration, and customer briefing and support. Most projects were UNIX based, often on Sun and SGI hardware, although I gained significant experience working on super computers, PC’s, and Macs. CASE tools were often employed during project work, and I frequently took the lead role in searching for ways to improve our system development efforts. Most of the software development work was done in C and C++. I am intimately familiar with the X Window System, Motif, Visual Programming Environments, and several 3D graphics programming languages. I developed and used image processing software and 3D modeling and rendering software. I attended numerous training courses and conferences, and authored several technical papers.

Education

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| **M.S. Electrical Engineering, 5/88**Purdue University, W. Lafayette, INGPA: 5.5 / 6.0Computer graphics, AI, robotics  | **B.S. Computer & Electrical Engineering, 5/87**Purdue University, W. Lafayette, INGPA: 5.6 / 6.0Broad curriculum in computer hardware and software  |

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Publications

 "*Out-of-the-box ITers*", PC Week, March 6, 2000, pg. 64. Featured in an article describing working for a startup.

 "*Hyperspectral Imaging Spectrometer Data Analysis Using AVS*", AVS '93, Orlando, FL., May 25, 1993, Cochand, J..

 "*Global Reference Analysis and Visualization Environment (GRAVE)*", SPIE Proceedings, Boston, MA, November, 1992, Rodgers, T., Cochand, J., Sivak, J..

 "*New Approaches to Data Representation, Processing, and Visualization for Hyperspectral Data Analysis*", International Symposium on Spectral Sensing Research, Maui, Hawaii, November, 1992, Brockenbrough, A., Cochand, J., Parr, J., Rodgers, T., Savage, K., Steinberg, S..

 "*Using Perspective Viewing for Better Visualization of Forest Damage*", Proceedings of the ASPRS-ACSM '90 Fall Convention, Anaheim, CA, November, 1990, Defeo, N., Savage K., Cochand, J..

 "*Multi-Source Fusion for Target Detection*", Technical Symposium on Optical Engineering and Photonics in Aerospace Sensing, SPIE Proceedings , Orlando, FL, April, 1990, Izraelevitz, D., Cochand, J..

 "*A Near Real-Time Gravity Gradiometer Data Review System,*" Proceedings of Position, Location, and Navigation Symposium, Las Vegas, NV, March, 1990, Brzezowski, S., Cochand, J. , Murano, L., White, J. , Wylie, J. , and Heller, W..

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Activities and Interests

 Sailing Widgeons, MegaBytes, or bare-boating in the Caribbean.

 Manchester Essex Conservation Trust

 Individual & team sporting activities such as softball, basketball, golf, ultimate frisbee, racquetball, and volleyball.

 Volunteer teaching.

 Coaching kid's sports teams.

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Contract Preferences
I am equally adept in both the Microsoft and Unix environments. I have designed and implemented many scientific algorithms, web-based applications, user interfaces, and databases and database applications. Image processing and high-end 3D graphics development is an area where I have strong interest and ability. I also have a long history using Thunderstone’s Texis, Webinator, and Vortex products.

I am especially valuable in a startup environment because I am a developer that keeps my focus on the big picture, even while implementing the lower level details. I have significant project leadership, management, and design & architecture experience and welcome that type of role, but I also want to devote the majority of my time to hands-on application development.

Massachusetts north shore driving commutes east of 93 are my most reasonable commute. I can drive as far as Burlington or possibly Waltham on a regular basis. A little further, including Cambridge and NH, if the majority of the work can be done offsite in my office. I can take the train down to Boston's financial district.

I enjoy working on unique and unusual projects. I am willing to work short-term projects, even if they last only a week or less, and also enjoy longer-term projects. I am fully incorporated (Eagle Rock Systems, Inc.) & work only on a corp-to-corp 1099 basis. I frequently work partially off site out of my office, but enjoy working onsite and building relationships with coworkers.

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