***Summary***

Principal software developer with over 20 years of development experience.

Exceptional experience working in critical deadline environments.

Strong leader with extensive background supervising and training developers.

Extraordinary technical capability and vision; able to immediately master new concepts and technologies.

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| |  |  |  | | --- | --- | --- | | Technology | Skill (1-5) | Experience (Years) | | | |
| |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  | | --- | | [Desktop Software](http://www.lumier.com/) | | |  |  | | --- | --- | | Lumier | 2014 | | | | |  | | --- | | Database Access Server | | |  |  | | --- | --- | | CustomerLobby | 2013 | | | | |  | | --- | | Remote Desktop | | |  |  | | --- | --- | | HopTo | 2013 | | | | |  | | --- | | Admin Setup Package | | |  |  | | --- | --- | | Contra Costa County | 2013 | | | | |  | | --- | | [Healthcare Software](http://www.plexisweb.com/solutions/quantum_choice.html) | | |  |  | | --- | --- | | [Plexis](#Senior_Software_Developer_Plexis) | 2010 | | | | |  | | --- | | Image Search Engine | | |  |  | | --- | --- | | Light Image | 2010 | | | | |  | | --- | | [Game Development Tools](http://en.wikipedia.org/wiki/Lithtech) | | |  |  | | --- | --- | | [Monolith](#Senior_Software_Engineer_Monolith) | 2009 | | | | |  | | --- | | [Desktop Photo Sharing](http://contour.com/software/storyteller) | | |  |  | | --- | --- | | Twenty20 | 2008 | | | | |  | | --- | | Windows 7 | | |  |  | | --- | --- | | Microsoft | 2008 | | | | |  | | --- | | [Mobile Media Streaming](http://solsie.com/2008/09/microsoft-mobile-media-beta/) | | |  |  | | --- | --- | | Microsoft | 2007 | | | | |  | | --- | | Desktop Contact Database | | |  |  | | --- | --- | | Seagull | 2007 | | | |  | | --- | | [Windows Vista Security](http://en.wikipedia.org/wiki/Security_and_safety_features_new_to_Windows_Vista) | | |  |  | | --- | --- | | Microsoft | 2006 | | | | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  | | --- | | [Windows OneCare Live](http://en.wikipedia.org/wiki/OneCare) | | |  |  | | --- | --- | | Microsoft | 2006 | | | | |  | | --- | | Job Search Engine | | |  |  | | --- | --- | | NovusTek | 2005 | | | | |  | | --- | | [MSN.com Management Reports](http://support.msn.com/) | | |  |  | | --- | --- | | Microsoft | 2005 | | | | |  | | --- | | Identity Theft Prevention | | |  |  | | --- | --- | | NIPB | 2004 | | | | |  | | --- | | [Microsoft SCOM](http://www.microsoft.com/systemcenter/en/us/operations-manager/om-overview.aspx) | | |  |  | | --- | --- | | Microsoft | 2004 | | | | |  | | --- | | [Microsoft Flight Simulator](http://www.microsoft.com/games/flightsimulatorx/) | | |  |  | | --- | --- | | Microsoft | 2003 | | | | |  | | --- | | [Microsoft Works](http://www.microsoft.com/products/works/ProductDetails.aspx?pid=003) | | |  |  | | --- | --- | | Microsoft | 2002 | | | | |  | | --- | | Internet Explorer Add-on | | |  |  | | --- | --- | | NovusTek | 2002 | | | | |  | | --- | | [Physical Access Control System](http://www.synergissystems.com/) | | |  |  | | --- | --- | | Synergis Systems | 2001 | | | | |  | | --- | | [MS Exchange Reporting Server](https://docs.google.com/viewer?a=v&q=cache:hPG8QNFUOXYJ:download.netiq.com/CMS/DATASHEET/DS_AA_Exchange_10JUNE04.pdf+&hl=en&gl=us&pid=bl&srcid=ADGEEShPyZPZN0r4LNmndowS8op3A1205x1wRZS7K6D60LRjkdHWFXY1axTza0vbsHMdBg0C3vvgxThinkYvVCQ-v-bpjV_IDMQDNmMbtC91d6bPZdbhyAq5kIsZOKWhJP97WQUJlBsD&sig=AHIEtbSXW0vTv8P0iw4ub_Y0uX-jhD5sog) | | |  |  | | --- | --- | | NetIQ | 2001 | | | | |  | | --- | | [Army Men](http://en.wikipedia.org/wiki/Army_Men) | | |  |  | | --- | --- | | 3DO | 1999 | | | |  | | --- | | 3D Engine SDK (MRM) | | |  |  | | --- | --- | | Intel | 1999 | | | | | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  | | --- | | Windows 2000 – [Alpha FX!32](http://en.wikipedia.org/wiki/FX32) | | |  |  | | --- | --- | | Microsoft | 1999 | | | | |  | | --- | | [Ultrasonic Visualization](http://en.wikipedia.org/wiki/Ultrasonic_testing) | | |  |  | | --- | --- | | Ultrasonic, Inc. | 1998 | | | | |  | | --- | | Army Men | | |  |  | | --- | --- | | 3DO | 1998 | | | | |  | | --- | | 3D Engine | | |  |  | | --- | --- | | GamenSoft | 1998 | | | | |  | | --- | | [Microsoft DirectX](http://en.wikipedia.org/wiki/DirectX) | | |  |  | | --- | --- | | Microsoft | 1998 | | | | |  | | --- | | ArmyMen | | |  |  | | --- | --- | | 3DO | 1998 | | | | |  | | --- | | [Microsoft SMS](http://en.wikipedia.org/wiki/Microsoft_Systems_Management_Server) | | |  |  | | --- | --- | | Microsoft | 1997 | | | | |  | | --- | | Miscellaneous Web Sites | | |  |  | | --- | --- | | RXL Pulitzer | 1997 | | | | |  | | --- | | Order Entry SQL Database | | |  |  | | --- | --- | | Pyramid | 1996 | | | | |  | | --- | | [Microsoft Visual Sourcesafe](http://en.wikipedia.org/wiki/Visual_sourcesafe) | | |  |  | | --- | --- | | Microsoft | 1996 | | | | |  | | --- | | [Packard Bell Navigator](http://www.guidebookgallery.org/guis/pbnav/screenshots) | | |  |  | | --- | --- | | Ark Interface | 1993 | | | |  | | --- | | Word Processor | | |  |  | | --- | --- | | Digital Software | 1996 | | | | |

***Experience***

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| --- | --- |
| **Lead Developer / Architect**  Lumier  01/11 – Present  C++ / C# / .NET / WinSDK / WPF / XAML / COM / Direct2D / Direct3D | Designed, developed, and directed the creation of an advanced multi-platform operating system shell from the ground up; rivaling all others in functionality and use. Designed an advanced graphics UI framework; rivaling frameworks such as WPF/XAML. The engine interfaced with Direct2D and Direct3D to provide better performance than typical UI frameworks.  Built a startup team of 5 from initial phases, to full operational capacity.  Managed all schedules and reporting, with on and off site staff.  Managed development outsourcing of components with different outsourcing companies and developers.  Led the team to meet critical milestones.  Designed and built processes on the client and server side for collecting metrics related to customer engagement and retention.  Lived and worked with team members 24/6 for 6 months. |
| **Software Architect**  CustomerLobby - Contract  06/13 – 11/13  C# / .NET / SQL | Designed and developed CustomerLobby Agent which transforms client data from different database servers and uploads the data to the cloud. |
| **Lead Developer**  HopTo - Contract  07/13 – 09/13  C++ / C# / .NET / Java / Objective-C / IOS / Android | Designed and developed a remote desktop framework for editing Microsoft Office documents on a mobile device while still running on your PC. Analyzed issues with and added new features to IOS and Android applications. Upgraded backend server networking code to utilize high performance multithreaded TCP/IP communication. |
| **Senior Software Engineer**  Contra Costa County - Contract  03/13 – 06/13  C# / .NET / MSI / WIX | Combined multiple existing setup packages and condensed them into one setup package, to be installed administratively across the company network. |
| **Senior Software Developer**  Plexis - Contract  04/10 – 10/10  C# / .NET / COM / SQL / NHibernate | Designed and developed a medical code grouping component for the X12 based claims adjudication software Plexus QuantumChoice. The open architecture design of the component facilitated connecting with diverse third party software such as 3M GPS Grouper and Ingenix EASYGroup, used for automated medical code grouping during claim adjudication and reimbursement. |
| **Lead Developer**  Light Image - Contract  06/09 – 03/10  C# / .NET / SQL | Designed and developed the backend for an online image aggregator. This project involved creating extraction mechanisms for disparate data sources, and implementing a backend SQL database. |
| **Senior Software Engineer**  Monolith - Contract  10/08 – 05/09  C# / .NET / WinForms / C++ / MFC | Developed new features and fixed existing issues for internal game tools. Created an interactive control for editing animations, similar to Adobe After Effects which allowed placing tracks on a tree view type control. |
| **Lead Developer**  Twenty20 - Contract  12/07 – 07/08  C# / .NET / WinForms / XML / C++ / DDK / MSI / WIX / InstallShield | Designed and lead development on a desktop video sharing application for a wearable action camera. I was initially given a set of business objectives and prototype software, from which I was responsible for the overall design, architecture, schedule, and leading development to version 1.2. During this position I was also responsible for establishing larger business and software development practices. |
| **Software Design Engineer**  Microsoft - Contract  12/07 – 04/08  C++ / Win32 / XML | Developed the new WIFI UI and connection stack for Windows 7. This project involved modifying the existing UI and connection state machine from Windows Vista, in accordance with the new design for Windows 7. I also participated in design reviews and contributed to the connection UI flow. |
| **Software Design Engineer**  Microsoft - Contract  02/07 – 10/07  C++ / C# / MFC / Win32 / ATL / COM / .NET / XML / XSLT / ASP.NET / HTML / DirectShow / WMS / WME | Investigated and fixed complex media streaming issues for a mobile media platform. Created network streaming test tools to aid in the diagnosis and resolution of video encoding issues. Designed and developed a product support tool, to aid users in fixing problematic installations. Designed the media encoding architecture for v2, which involved moving from a Windows Media Encoder solution to DirectShow. |
| **Senior Software Engineer**  Seagull - Contract  07/06 – 01/07  C++ / MFC / Win32 | Designed and developed a database client application, similar to Microsoft Access but much simpler in that it was designed to provide a streamlined approach to allow users to work with a list of contacts from which to print labels. This position also involved integrating a public UI library built on top of MFC, and an internal support infrastructure code library. |
| **Software Design Engineer**  Microsoft - Contract  03/06 – 06/06  C++ / C# / Win32 / .NET / XML | Investigated and fixed security defects in Microsoft Windows Vista. I was responsible for fixing security issues such as buffer overflows in the Windows code base. |
| **Software Design Engineer**  Microsoft - Contract  07/05 – 02/06  C++ / ATL / COM / C# / .NET / XML / MSI / WIX | Investigated and fixed complex product quality issues for Windows OneCare Live. During this position I was involved in the sustained engineering effort for releasing version 1 and was responsible for some of the most important setup and upgrade issues. I quickly completed complex problem investigations and created diagrams/documentation to help other developers understand difficult parts of the source code. |
| **Lead Developer / Architect**  NovusTek - Contract  02/05 – 06/05  C# / .NET / ASP.NET / ADO.NET / SQL / HTML / XML / XSLT | Designed and developed a web site which filters online job postings from different job sites and automatically submit user's resumes. XSLT was used to transform HTML into XML which would be inserted into a SQL database with an XSD mapped table structure. |
| **Senior Software Developer**  Microsoft - Contract  09/04 – 01/05  C# / .NET / ASP.NET / ADO.NET / VBA / VBScript / COM / SQL / OLAP / HTML / XML / XSLT | Designed a reporting web site for the MSN support PM team covering all MSN properties.  I began working on making urgently needed modifications to the existing reporting system. The old reporting system was built using excel worksheets with embedded VBA which would run MDX queries and populate each excel template file. PM's typically needed frequent updates to the support metrics for each report. This work was done concurrent to the new reporting system.  During the transition to the new reporting system, I designed and developed an interim solution which streamlined the process and allowed PM's to change support metrics in a master excel spreadsheet which used XML mapping to export to an XML file. The master XML file would be used by one excel template file which would generate all the reports.  My responsibilities for this position included debugging and modifying a large SQL database which contained support tickets for all of MSN support. Database performance and using OLAP cubes was essential due to a very large dataset.  The new reporting system was an ASP.net web site, which allowed PM's to drag and drop different support metrics onto reports and publish either to the group or themselves on different schedules. |
| **Lead Developer / Architect**  NIPB - Contract  03/04 – 08/04  Contract  C# / .NET / ASP.NET / ADO.NET / VBScript / COM / SQL / HTML / XHTML / XML / XSLT | Designed and developed a web site (NIPB.com) which provides subscribers with monthly reports to monitor their backgrounds for preventing identity theft.  XSLT was used to transform HTML pages from multiple different background information web sites into XML which was stored in XSD mapped SQL tables. The reports would then be displayed to the user by using XSLT to transform the XML from the database into report HTML pages displaying the user's background information. |
| **Applications Developer**  Microsoft - Contract  06/03 – 02/04  C++ / C# / COM / VBScript / XML / SQL / WMI / HTML | Implemented new Management Packs for Microsoft Operations Manager. Development consisted of writing VBScript which interfaced with WMI and various COM objects to monitor the status of server software such as IIS, SQL, and Exchange. |
| **Software Design Engineer**  Microsoft - Contract  06/02 – 02/03  C++ / MFC / HTML / XML / JavaScript / VBScript / SQL / Access | Implemented the new weather and GPS UI features for Microsoft Flight Simulator. Added new features to air traffic control sound database.  The new weather UI development consisted of reorganizing the UI for how weather stations are selected and set. I was responsible for deciding on how to best incorporate the revamped UI into the existing UI, while minimizing the amount of work required. Implemented a selection interface with a higher complexity than the existing UI. Developed a UI using XML and a custom embedded scripting language, which emulated a real world GPS product used in aircraft. Participated in UI design reviews and the QA process. Implemented new features into a database, which consisted of editing MSAccess forms and implementing new SQL queries and stored procedures. |
| **Software Design Engineer**  Microsoft - Contract  03/02 – 05/02  C++ / ATL / WTL / COM / HTML | Created the new Task Launcher for Microsoft Works. The Task Launcher is a shell that allows access to other Works applications and projects, and displays appointment information. After receiving a specification for the visual layout of the new Task Launcher, I designed and developed the entire project.  Implemented the UI and mechanism for displaying and tracking a list of the most recently run applications. Implemented the in place calendar which retrieves appointment information from the Works Calendar application through COM objects. HTML is generated from appointment information and then shown in the in-place HTML container control. Developed UI elements such as tabs using bitmap regions with one-pixel accuracy. |
| **Lead Developer / Architect**  NovusTek  04/01 – 03/02  C++ / MFC / ATL / COM / IIS / ASP / ISAPI / ADO / SQL / OLAP / WinSock / MSI / HTML / XML / JavaScript / VBScript / VB / C# / .NET | Designed and developed NovusTek Internet Updates, which allows users to check when web pages have been updated.  Designed and developed the NovusTek.com website, back end SQL database, and intranet. Portions of the NovusTek.com website relied on data entry involving ASP web pages, stored procedures, and SQL queries. Developed DTS packages on SQL server to transfer data from simple log tables on the external web server to referential tables on the internal SQL database. Researched and invented an advanced process for checking web site for updates. Developed internal tools for use in batch testing primary application functionality, which would query and process thousands of web sites simultaneously. |
| **Senior Software Engineer**  Synergis Systems – Contract  10/01  C++ / MFC / WinCE / SQL | Developed a prototype UI solution for an access control system administration interface. Developed a lightweight database to run on Windows CE systems which would store local access information for the device. Designed an SQL database for the core access control system. |
| **Lead Developer / Architect**  NetIQ Corporation  10/99 – 04/01  C++ / MFC / COM / ATL / ASP / OLEDB / ADO / SQL / OLAP / MSI / HTML / XML / JavaScript / VBScript | I began working at NetIQ when there was only a general product overview completed. With the general product overview, I designed everything from the core server to the user-friendly web interface. I was responsible for technically directing the product, leading and mentoring developers, and developing core components.  NetIQ AppAnalyzer is a server, which runs on Windows NT. It allows organizations to analyze Microsoft Exchange, by collecting data, combining and processing the data, and then generating a report. An advanced user interface runs on IIS, which in turn calls COM objects through ASP. The server is built as an ATL NT Service, which hosts the COM objects used by the web user interface, gathers data, and generates reports. The data gathered by the AppAnalyzer is stored in SQL, and then processed by OLAP, which produces a report in XML.  Development consisted of designing and implementing the C++ class architecture for the NT service, and designing and developing ASP pages with advanced scripting and DHTML controls similar in functionality to windows common controls such as the Tree and list view controls.  Designed and had complete control of architecture for AppAnalyzer for MS Exchange.  Designed and led development of core server code.  Designed and led development of the Web User Interface.  Led, managed, and mentored developers/testers.  Worked on v1.0 – v1.1, from Day 1.  Led the team to successfully create a v1.0 product with the quality of a v2.0 product.  Direct reports - 2 developers. |
| **Senior Software Engineer**  3DO - Contract  06/99 – 08/99  C++ / MFC | Army Men was a top selling entertainment title, of which there have been several different versions, which run on several different platforms. During the three positions I held at 3DO, I was responsible for improving the Map Editor for Army Men. I also created a commercial version of the Map Editor to ship with Army Men, which involved simplifying and cleaning up the user interface.  Worked on the Map Editor for Army Men.  Added advanced tile based map-editing features.  Fixed existing bugs. |
| **Senior Software Developer**  Intel Corporation - Contract  01/99 – 02/99  C++ / DirectX / OpenGL | The Intel MRM SDK was a library used by 3D game developers, to dynamically change the resolution of 3D objects. I was responsible for creating advanced 3D controls for use in the viewer application that ships with the SDK. This included a joystick type control, used for rotating the current 3D object. |
| **Software Design Engineer**  Microsoft / Compaq - Contract  11/98 – 08/99  C++ / MFC / COM / MMC / Assembly (x86 & Alpha) | wx86/fx32 was a software component for Windows NT, which is used to dynamically and statically convert x86 instructions to Alpha. In effect, allowing software originally written for Intel processors to run on Alpha processors.  During my position at Compaq and Microsoft, I was responsible for debugging applications being dynamically converted. This involved viewing x86 and Alpha processor instructions at the same time, and debugging within Windows NT Win32 API functions and internal COM layers.  Developed a MMC application and scheduling ActiveX control for use in replacing the existing control panel applet for setting FX32 options.  Designed and developed a complete visual debugger for use in debugging applications being converted from x86 to Alpha. Similar to the Visual C++ IDE debugger, it provided disassembly and dual register/memory views. This would essentially show the application being debugged, concurrently in x86 and Alpha.  Worked on Windows 2000 Alpha - wx86/FX32.  Created a Visual Cross-Platform Alpha/x86 Debugger (Similar to Visual C++ Debug IDE), for use in debugging x86 applications when running on an Alpha processor. Primary uses included viewing x86 and Alpha assembly code at the same time while it was being debugged.  Fixed compatibility issues in wx86 OS layer.  Fixed bugs within Win32 API functions. |
| **Senior Software Engineer**  Ultrasonic - Contract  10/98  C++ / MFC / OpenGL | Worked on a scientific application used with a device for measuring plywood granularity with ultrasonic sound.  Added real-time OpenGL rendering to display plywood granularity, and fixed showstopper bugs before deadline. |
| **Senior Software Engineer**  3DO - Contract  05/98 – 08/98  C++ / MFC | Worked on the Map Editor for Army Men.  Added advanced map editing features, and fixed bugs. |
| **Lead Developer / Architect**  GamenSoft  01/98 – 10/99  C++ / MFC / DirectX / x86 Assembly | During my position at GamenSoft, I was responsible for designing and developing an advanced 3D engine. The engine allowed users to navigate and interact with a 3D world. This position also involved creating a tool, which would export 3D objects from 3D Studio MAX for use in the world creation tool, which allowed 3D object placement and property editing.  Designed and developed an advanced 3D engine, and associated tools. |
| **Software Design Engineer**  Microsoft - Contract  01/98 – 07/98  C++ / MFC / DirectX | My responsibilities with the DirectX team at Microsoft included creating the base make files for the DirectX SDK, and implementing the sound test in DirectX Diagnostics.  Updated samples for DirectX6, and added features to DX Diagnostics.  Created the makefile base for all SDK samples, which allowed compilation with three different compilers. |
| **Senior Software Engineer**  3DO - Contract  05/97 – 01/98  C++ / MFC | Worked on the Map Editor for Army Men.  Added advanced map editing features, fixed bugs, and created a commercial version. |
| **Senior Software Engineer**  Microsoft - Contract  02/97 – 04/97  C++ / MFC | This work involved creating a sender extension for Microsoft SMS, which allowed tracking physical parcels being delivered between SMS servers/clients. Creating the Sender extension involved writing a small MFC application, which called into SMS, and allowed creating and editing listed physical parcels. |
| **Senior Software Engineer**  RXL Pulitzer - Contract  11/96 – 09/97  C++ / MFC / VB / COM / ASP / SQL | This position involved creating ASP based E-commerce web sites for numerous clients. One of these projects involved creating an E-Commerce web site for the State of Washington, which allowed campground reservations to be done online. I also created a recording control for a multimedia title, and a CGI app for a web site that was hosted on Unix. |
| **Senior Software Engineer**  Pyramid - Contract  09/96 – 11/96  C / C++ / MFC / ODBC / SQL / dblib | Sales and order personnel would use this application to enter orders for bank checks into a backend SQL database. In addition to writing C++ code which made calls to the SQL database, this also involved handling events from an external device, which would read routing and account numbers from personal checks. |
| **Software Design Engineer**  Microsoft - Contract  01/96 – 08/96  C++ / MFC | Visual SourceSafe is Microsoft’s version control software bundled with Visual Studio. During this position I was involved in implementing several new features for version 5, and fixing numerous product defects.  Implemented “Open SourceSafe Database” functionality in Visual SourceSafe.  Implemented Web functionality into Visual SourceSafe, allowing creation of HTML site maps for web sites, and to deploy files with FTP.  Created a self-extracting setup executable to install wininet.dll on NT4 systems (wintdist.exe). |
| **Senior Software Engineer**  Ark Interface - Contract  08/93 – 10/93  C++ / MFC | Created an application for Packard Bell Navigator, which displayed available resources, and provided a button bar for Windows accessories. |
| **Lead Developer**  Digital Software  1990 – 1996  C / C++ / MFC / VB | During this position I designed and lead development on a word processor, and was responsible for implementing customer requests and adding new features in later releases.  Designed, and developed a word processor and supporting applications. |