

**Objective:** A challenging position using technology that may include:

- Team and project management.
- Architecture, design, development and implementation of web services and data warehouse applications.
- Simulation and embedded software programming.
- General computer technology contracting.

**Education:** Bachelor of Science Degree in Computer Science, Calvin College 1997

**Experience:** I have over 10 years of professional commercial software development predominately in C++ and C# with experience from product inception to rollout. All my experience is detailed at: <http://www.bierling.net/pages/projects/projects.htm>

**Lead Pursuit**  
[Lead-Pursuit.com](http://Lead-Pursuit.com)

Executive Producer, Lead Developer, co-founder, and part owner of Lead Pursuit. Lead Pursuit has developed the award winning Falcon 4.0 Allied Force based on the legendary Falcon 4.0 F-16 combat flight simulator. (2004 – Present)

- Managed and provided leadership to a team of 18 developers setting individual goals and priorities. Defined project objectives and schedules.
- Managed an executive team setting strategic direction.
- Developed key aspects of software (Visual Studio and C++) including aviation and avionics systems, artificial intelligence and network and bandwidth management (peer to peer and client server modes). Developed the communication and integration layer between the graphics (C# .Net) and simulation (C++) engines. Worked with the client front end graphics toolset (C# .Net) to develop the 3D world. Optimized and debugged software using Intel VTune, Rational Purify and other memory validation tools. Extensively involved with toolset, Windows Win32 API and SDK integration.
- F4Patch (C++) Programmed and designed the F4Patch modification system for Falcon4. Estimated user base around 50,000 users.

**Abante Systems**  
[Abante.com](http://Abante.com)  
[MITracker.us](http://MITracker.us)

Lead Programmer, co-founder and minority owner of Abante Systems. Abante Systems is a software development company specializing in educational software used throughout the United States. (1997 – 2009)

- Designed, developed, and managed Abante's development team for its main products, MITracker (C# .Net web service, IIS, SQL Server) and Progression (C++, VB, OLE DB, dBase, SQL Server and any other relational database). MITracker allows administrators easy access to standardized testing results over the web. Progression is curriculum management software that helps teachers track student grades and progress. The testing reports were generated using Crystal Reports, Crystal Enterprise and Business Objects.
- Worked with the State of Michigan Department of Education designing and developing the Education YES! web site (Linux, C++, Apache, FastCGI, PostgreSQL). Over 4000 schools throughout the State of Michigan used the website to submit self-assessment data. Over 4000 schools throughout the State of Michigan used the web site to submit self-assessment data.
- MEAP Assistant (C++) - Worked with the local county school district developing software that reports on student MEAP results.
- Progression for the Web (C++, ISAPI, IIS, Apache, JavaScript) - Curriculum and student grade management software.
- Progression for MacOS (1997-1998) - Curriculum management software (Metrowerks CodeWarrior C++).
- Administered, maintained and supported SQL Server database high performance server farm with replication, clustering and automated backup.

**Phoenix Data Systems**[PhoenixDataSystems.com](http://PhoenixDataSystems.com)[PanoReality.com](http://PanoReality.com)

Co-founder and co-owner of Phoenix Data Systems. Phoenix Data Systems provides consulting, photography, and software services to publishing companies worldwide. (1995 – Present)

- Created PanoReality Explorer, a multimedia virtual tour program that is fully interactive and provides a full 360-degree field of view. Windows Version (C# .Net WinForms, VB6, OpenGL) and for the Web (JavaScript). Sold internationally (US, Canada, Jordan).
- Developed Image Database (VB6), a program that stores an archive of 20,000+ photographs for licensing of various sites in the Middle East. Its online database uses Apache, PostgreSQL, and PHP for easily accessible searches. Uses EXIF and IPTC metadata.
- Image Database Online - A Database that keeps track of my image archive of around 20,000 images and videos. Search on the web! First written using Java then rewritten for IIS and Active Server Pages (ASP). Also rewritten to use Apache, PostgreSQL, and PHP.
- PanoReality Builder (VB6) - A program that constructs the information that PanoReality Explorer uses to present its information.
- PanoReality.com (JavaScript, CSS, HTML) - Designed and developed website for 360 degree photography virtual tour spinoff.
- [AJVinc.com](http://AJVinc.com) (JavaScript, CSS, HTML) - Designed/developed website for architectural firm AJV Inc.

**Ford Motor Company**[Ford.com](http://Ford.com)

North American End User Support, Process Leadership. Worked with the Global Incident Reporting System (GIRS) developing WWW applications and support. (1996)

**Greiner Inc**[URSGreiner.com](http://URSGreiner.com)

Applications programmer (Visual Basic). Greiner is an international architectural firm specializing in airport and school building design. (1995 –1996)

- Detail Manager (VB DOS) - A database to keep track of AutoCAD details.
- Plot Description Manager (VB DOS) - Allows managers to write descriptions about projects.
- Floating Notes (VB DOS) - A major limitation of Lotus Notes was that it only allowed for one user. This program creates a login for Lotus Notes so multiple people can use the same computer and same installation of Lotus Notes.
- Many VB DOS programs dealing with the AutoCAD plotting system.

**Languages and Programming Environments**

Microsoft Visual Studio including C/C++ (15+ yr) with Microsoft Foundation Classes (MFC) and Win32 API (15+ yr), C#/.Net (5+ yr) and Visual Basic (20+ yr). SQL (15+ yr) (SQL Server, Oracle, MySQL, PostgreSQL). Metrowerks CodeWarrior with PowerPlant (1 yr) Java (1 yr), JavaScript (10+ yr) HTML (15+ yr), XML (5+ yr), CSS (5+ yr), Perl (1 yr), ASP (5+ yr), AJAX, PHP (1 yr), QuickBasic (5+ yr), Fortran 90 (6 mo), Modula II (1 yr), COBOL (6 mo), Sparc and x86 Assembly (6 mo). Extensive experience with CVS and SVN. Used Intel VTune and Rational Purify.

**Operating Systems**

MS DOS, all versions of MS Windows, Mac OS, Mac OSX, XWindow, Linux, Solaris.

**Networking Protocols**

TCP/IP and UDP

**Applications**

Microsoft Project, Office, Excel, Access, Visio, Adobe Photoshop (15+ yr), Joomla CMS, Dreamweaver, Sony Vegas, Crystal Reports, Crystal Enterprise and Business Objects.