

Michael Horgan

Summary

An experienced, enthusiastic and flexible software developer, comfortable in senior engineering, project leadership and customer-facing roles. I am particularly interested in opportunities to blend my engineering, writing and interpersonal skills in a senior customer-visible technical role.

Technical Expertise

7 years **C++**, 2+ years **Java2/Swing**, 3+ years **COM/DCOM/ATL**, 3+ years **Visual C++/Basic**, 3+ years **Web Applications (DHTML, XML/XSL, JSP, JDBC, ASP, JavaScript, Apache, IIS)**, 3+ years **NT/Win2K**, 12+ years **C**, 10+ years **Unix**, 8+ years **Motif/X Window System**
4+ years **Project Leadership**, 3+ years **Project Management**, 2+ years **Team Leadership**
Also: **Design Patterns, UML, Perl, TCL/TK, SQL Server, Sybase, Oracle, SNMP, SCSI**

Experience

4/2003 – Present **Performance Motion Devices** **Arlington, MA**

Senior Software Engineer (Consultant)

Technologies: Java2, Swing, XML/XSL, Eclipse, C, TCP/IP, SCSI, Perl, Win32, Linux

PMD (www.pmdcorp.com) is a leader in the worldwide market for embedded motion-control chipsets. I consulted on their development kit software package, Pro-Motion. During this period I was half of a two person team upgrading Pro-Motion to version 2.0. I added significant enhancements to the graphical motion tracking UI, and added support for real-world units conversion throughout the UI. This work was performed using C++ and MFC on the Win32 platform.

7/2002 – 3/2003 **I/O Integrity Inc.** **Medway, MA**

Project Lead: Configuration and Monitoring Interface

Technologies: Java2, Swing, XML/XSL, Eclipse, C, TCP/IP, SCSI, Perl, Win32, Linux

I/O Integrity (www.iointegrity.com) is a startup developing application acceleration technology based on advanced I/O caching algorithms. My role is to design and develop the system monitoring UI, including the backend system statistics support and the in-band data transfer protocol.

- Designed, implemented and evolved IOI's remote management protocol, including asynchronous event reporting and transparent support for both TCP/IP and in-band SCSI transport layers.
- Designed and implemented the IOI Dashboard, featuring an automobile-themed graphical display of system IO statistics, performance history charting and statistics database, system configuration screens and an interactive console interface. This was written in Java/Swing.
- Developed Win32 inband SCSI communication service, which allowed the pure Java GUI to communicate with IOI's application accelerator via system-specific IO interfaces.
- Initiated and engaged in many small projects outside my specific area of responsibility, as would be expected in a dynamic startup environment.

Experience (cont)**1/2002 – 7/2002****Pocomo Technologies Inc.****Arlington, MA****Lead Consultant**

During this six month period I contracted on two projects:

WebGen Systems Inc., Cambridge MA

WebGen (www.webgensystems.com) is an innovative building energy management ASP. I consulted on the demand-prediction subsystem, which uses neural networks to predict building behavior based on sensor history data. Because this is a CPU-intensive task, I developed a distributed system for processing sensor history data using a flexible pool of networked computing resources. I also implemented and optimized various database collection and manipulation processes.

Aeronautical Data Systems, Newark NJ

ADS markets a pre-flight oxygen/fuel planning system for use in commercial and business jet aircraft. This project's goal is to significantly enhance the usability and marketability of ADS's existing product. This involved gathering requirements from pilots, refactoring major elements of the existing system, designing and implementing the OPP Airplane Factory to ease customer deployment and providing a roadmap for future development of the system.

7/2001 – 11/2001**Cereva Networks****Marlboro, MA****Software Architect (Consultant)**

Technologies: Java2, Swing, JClass Charts, XML/XSL, Apache/Tomcat JSP, SNMP, Fibre Channel, WinNT, Solaris 7/8, Perl, ClearCase, Sybase 11.9.2, HP/Trinagy TREND

Cereva (www.cereva.com) is a pre-shipment startup developing a next generation enterprise storage device. During this 3.5 month consulting engagement, I:

- Provided early feedback and design rationale resulting in a significant redesign of the Cereva XML Gateway (a user-accessible XML-based monitoring and provisioning server).
- Designed and implemented first release of Cereva's custom performance monitoring and capacity forecasting tools using a combination of commercial network management software (TREND 4.0 from HP/Trinagy) and custom Java/JSP GUIs. This software is deployed 24x7 in Cereva's worldwide support center as of Q4/2001.
- Developed an integration demo for a potential customer using XML to coordinate the Cereva 5000, Digital Fuel's SLA management solution, Xevo's MS Exchange provisioning system and Metratch's XML-based billing solution.

2/2001 – 6/2001**Wildfire Communications****Waltham, MA****Senior Software Engineer (Consultant)**

Technologies: UnixWare 7, C++, VoiceXML, PerForce, TCL 8, XML, DHTML, JavaScript, Apache, Oracle

Wildfire is a pioneer in the area of voice-activated messaging services.

- During this 4-month consulting engagement I designed, constructed and documented several web interfaces and the associated back-end service code for the provisioning of user accounts and SS7 Intelligent Networking services on the Wildfire voice-enabled messaging system (see www.wildfire.com).

7/2000 – 10/2000**Thomson Financial****Boston, MA****Software Architect (Consultant)**

Technologies: Win2K, Visual C++, DCOM, ATL, TCP/IP, Socket Programming, ILX DirectStream, IE5, XML, XSL, DHTML, JavaScript, IIS, ASP, ADO, SQL Server, SourceSafe

- Consultant to the National Regulatory Services (www.nrsboston.com) arm of Thomson. Designed a COM-based framework called TISIS (Thomson Information Services Integration Server) for integration of financial information feeds from multiple vendors.

Experience (cont)

4/2000 – 12/2000 Locata Networks Boston, MA

Founder and Software Architect

- Locata Networks was a prototype-stage startup focused on Internet rights management for Fortune 500 entertainment companies.
- Our technology is used to enforce existing geographically-defined distribution agreements in the borderless world of the Internet.
- Although we made significant progress, development activity was reluctantly shut down due to lack of funding.

1/1999 – 4/2000 Foliage Software Systems Burlington, MA

Technical Project Lead

Technologies: Windows NT4, Visual C++, UML, COM, DCOM, ATL, Java2, DeviceNet, GPIB, IE5, XML, JavaScript, VBScript, MS Scripting Host, IIS, ASP, ADO, SQL Server, Visual Basic, MS Access, SourceSafe, Pocket PC

Foliage (www.foliage.com) is a software outsourcing shop specializing in full lifecycle development using advanced OO design techniques and a rigorous yet lightweight software methodology. Foliage project leads are responsible for the upfront requirements analysis and design specifications, project management, customer interaction and significant development tasks on their projects.

- Led successful team effort to develop a programmable testing platform for a leading manufacturer of Mass-Flow Controllers. The system allows non-engineers to develop web-based calibration and test scripts for DeviceNet-based measurement and control devices.
- Led successful effort to develop a rapid prototype for a web-based handheld medical portal.

11/1997 – 1/1999 Imachines Inc. Needham, MA

Founder, Senior Architect and Project Lead

Technologies: Windows NT 4, Visual C++, UML, COM, DCOM, ATL, Machine Control, Machine Vision, MS Scripting Host, Visual Basic, SourceSafe

Imachines (www.imachines.com) specializes in machine-control applications for the semiconductor industry. In addition to project outsourcing, they are developing a component-based framework for equipment control systems called SPEC.

- Served as project lead and architect on the Dynatex DX/VI project, a ground-up re-implementation of the control software for Dynatex International's line of wafer scribe and break machines using Imachines' component-based framework. Much of the early work on this project formed the basis for SPEC (such as the COM-based Finite State Machine engine).

10/1996 – 10/1997 New York Stock Exchange New York City

Software Engineer (Consultant)

Worked onsite at SIAC (the systems subsidiary of the NYSE) in the Stock Exchange's Brooklyn Data Center. This work on trading floor automation software was done in C++ and Motif 1.2 on HP/UX.

- Served as departmental mentor in OO programming and X/Motif. Developed several reusable object libraries related to the NYSE desktop environment.
- Developed a CDE-like Workspace Manager, an ICCCM compliant virtual desktop utility.
- Developed the X Access Services system, a network client/server database and tool suite that monitors the activities of all NYSE floor users and allows programs and human operators to track mobile users and applications on the exchange floor.

Experience (cont)**1994 – 1996 Integrated Computer Solutions Cambridge, MA****Senior Software Engineer**

During this three-year period I worked as a founding team member on the Database Xcessory project. DX is a database front-end GUI builder for Oracle and Sybase that is designed to feel natural to Motif programmers.

- Participated in complete product lifecycle from concept through design, prototype, implementation, release and update to DX 1.1.
- Handled complete responsibility for Schema Browser component, including db-independent DDL reader for Sybase, Oracle and MSOL using Motif, C++ and Tcl.

1992 – 1994 Pocomo Technologies Boston MA**Lead Consultant**

- Developed 600-page course book and software for ICS's Advanced Motif course. The weeklong course covered Motif Widget writing, advanced Xlib, I18N, ICCCM and other advanced topics. The course earned over \$1M in the four years following its release in 1993.
- Developed SGML translation and CGI software for Working Media, a Boston-based media services company.
- Presented introductory and advanced X Window System Programming seminars for Addison Wesley and ICS.

1989 – 1992 Integrated Computer Solutions Cambridge, MA**Software Engineer, Technical Training Lead**

During this 2.5-year assignment (my first post-college position) I worked with leaders of the X Window System industry in a fast-paced startup atmosphere. I worked on development and support of ICS' product line, and later found a niche in training and speaking professionally about X and related technologies.

Education**9/1985 – 12/1988 University Of Lowell Lowell, MA**

- Computer Science Major, Minor In American Literature
- GPA 3.4/4.0

Interests

Family, Personal Computing, Movies, Music, Photography, Motorcycle Roadracing

ReferencesAvailable at <http://www.mikehorgan.com/resume/>.