

Summary

A dedicated professional with experience in the design, implementation, and evangelism of software technologies seeks a challenging and rewarding development position.

Recent Experience

August 2002 – Present

Software Development Specialist, Illinois Center for Instructional Technology Accessibility ([AccessibleWizards.com](http://www.accessiblewizards.com))

- Lead Developer on the Illinois Accessible Web Publishing Wizard (<http://www.accessiblewizards.com>)
- Standards-compliant, accessible HTML output from Microsoft® Office via a simple GUI Wizard interface
- Coordinates additional developers and first-level technical support, provides engineering tech support
- Architects overall product and, working with end users, prioritizes feature inclusion
- Evangelism at workshops and trade shows, follows up sales leads
- Advanced product from prototype stage through to sales and support; now one of the top search engine results for publishing web content from Office
- Specifies and maintains development environment including multiple Visual Studio / .NET Runtime version transitions (1.0 to 1.1, 1.1 to 2.0), secure code-signing keys, Subversion (svn) server, and VMWare Workstation images for cross-OS, cross-Office QA
- Key Technologies: C#, Microsoft® Office Object Model, Extensibility API, XML, XSL, XSLT
- Additional Duties:
 - Designed and implemented a web-based IRC (Internet Relay Chat) client featuring a PHP front end and Java back end connected via socketed IPC utilizing a third-party Java IRC library.
 - Maintains select departmental PostgreSQL / PHP web applications, assists with server administration and upgrades

August 2000 – August 2002

Teaching Assistant, UIUC Dept. of Computer Science

- Held office hours, led lab sections, wrote exams and homeworks, coordinated homework grading, lectured (as needed)
- CS173 (Discrete Math, 300+ students), CS331 (Embedded Systems Software and Architecture), CS324 (Real-time Systems Theory)
- Both appeared on the “Incomplete List of Teachers Ranked as Excellent by Their Students” and received Teaching Assistance Excellence Award Fall 2000 and Fall 2001 for top 10% performance
- Updated all Embedded Systems Laboratory curricula for compatibility with new version of LynxOS and accompanying GNU C Compiler (gcc), GNU assembler (gas), and better POSIX compliance

Graduate Assistant, UIUC Division of Disability Resources and Educational Services

- Enabled and repaired keyboard accessibility features of the X Window System under Linux (specifically XFree86), including the design and coding of an open source AccessX configuration utility (<http://cita.rehab.uiuc.edu/software/accessx/>) modeled after the user interface and configuration file of a similar Sun utility (C/C++/Tcl-Tk)
- Investigated accessibility ramifications of Web-based RDBMS-backed applications, including XML
- Designed and implemented a Student Services database system including several novel features such as an email case notes interface and an interface into campus LDAP directory services to better integrate into existing staff work flow (Oracle, XML, XSLT, LDAP, Java, Servlets, JavaMail, JNDI)

Education

1996 – 2002, University of Illinois at Urbana-Champaign

- MCS (Master of Computer Science), May 2002; GPA 3.8 / 4.0; coursework included programming languages and compilers, fault-tolerant systems, object-oriented design methodologies, real-time systems, relational database systems, combinatorial algorithms, finite automata, high-speed parallel computation, and computer graphics.
- BS, Computer Science, May 2000; Honors, GPA 3.77 / 4.0; coursework included architecture, data structures, theory, operating systems, embedded systems, computer networks, parallel programming, data acquisition systems, and artificial intelligence.

Publications

- Gunderson, J. and Linder, D. (2004) Web Accessibility Wizard for Microsoft® Office, Proceedings of the CSUN Conference on Technology and Persons with Disabilities, Los Angeles.
URL: <http://www.csun.edu/cod/conf/2004/proceedings/282.htm>
- Linder, D. and Gunderson, J. (2003) Publishing Accessible WWW Presentations from Power Point Slide Presentations, Proceedings of the 26th RESNA Conference.
- Linder, D. and Gunderson, J. (2003) Publishing Accessible WWW Presentations from Power Point Slide Presentations, Proceedings of the CSUN Conference on Technology and Persons with Disabilities, Los Angeles.
URL: <http://www.csun.edu/cod/conf/2003/proceedings/174.htm>
- Gunderson, J. and Linder, D. (2002) AccessX and OnScreen Keyboard for Linux, Proceedings of the 25th RESNA Conference, pp. 123-125.
- Gunderson, J. and Linder, D. (2001) AccessX: Linux and XFree86 Accessibility. Proceedings of the CSUN Conference on Technology and Persons with Disabilities, Los Angeles.
URL: <http://www.csun.edu/cod/conf/2001/proceedings/0102gunderson.htm>

Major Academic Projects

- **Parallel Wall Fluid Dynamics Simulation:** An MPI application running an FFT-based fluid dynamics simulation. Computation and display were distributed across a cluster of Linux machines running MPICH. All were connected via Myrinet high-speed network and composed a single “wall” display. (C++, MPI)
- **ANSI-Compliant Exception Handling and Standards Verification in Smalltalk:** Continued work on a language features verification system for Smalltalk, specifically investigating the exception-handling characteristics of VisualWorks Smalltalk. (Smalltalk)
- **The Accessible Web Browser:** A web browser accessible to people with various disabilities, focused mainly on blindness and low vision. Project was an encapsulation of the Internet Explorer COM object within a wrapper application providing features such as annotated voice output, novel seven key navigation system, dynamic style sheet selection, and table linearization. (C/C++/COM/HTML/DOM)
- **Java subset (JO99) compiler:** lexer, parser, code generation, simple optimizations.
- **Raytracer:** Phong shading, reflection, refraction, shadows, texture mapping, specular highlights, antialiasing via supersampling and jitter. (C++)

Other Experience

May 1997 – August 2000

Consultant, UIUC Department of General Chemistry

Consultant, Materials Chemistry Lab of the School of Chemical Sciences

- Administered Windows NT, Workgroups, 95, 98, 2000, UNIX (IRIX), and VAX/VMS systems, including the Student Instructional Laboratories used in the General Chemistry curriculum, a heterogeneous mix of 75 stations with hundreds of users.
- Software development as needed.