

BARRY LATHAM

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SOFTWARE ENGINEER

- Comprehensive experience in software engineering with diverse expertise in designing, planning, and programming complex software systems.
- Skilled in performing detailed needs analysis and troubleshooting; including full responsibility for special projects and team leadership/mentoring.
- Proficient in application development, database systems, and object-oriented design with detailed knowledge of languages and developing for the Web.
- Proven capability in streamlining and consolidating processes to Internet applications.
- Skilled in designing and delivering training, client presentations, and documentation materials.

ACCOMPLISHMENTS

- Has continuously been at the forefront of technology
- Was among the first to apply Artificial Intelligence, at a corporate level, developing expert systems for the analysis of operating system crash dumps and the diagnosis of computer clustering problems
- Worked on the first commercial expert system language and graphical domain-knowledge capturing tool
- Worked on some of the first corporate web-based applications, including management tools and employee surveys, using the first beta-release of Microsoft's ASP.
- Worked on the first low-impact, real-time, continuous profiling and performance analysis tool that used chip-based hardware performance counters

TECHNICAL PROFILE

- Proficiency in application development, languages, object-oriented programming, web applications, databases, and user interface design and implementation.
- Expertise in C, C++, PHP, JavaScript, DoJo, JSON, Shell Script, MVC, SOA, REST, ASP (Active Server Pages), Visual Basic, VBScript, VB for Applications, SQL, SQLServer, MySQL, ActiveX (COM) objects, SharePoint, SourceSafe, DCL, Lisp, Scheme, and the Microsoft Windows, Linux, Unix, and VMS operating environments.

EXPERIENCE

Hewlett-Packard Company, Nashua, NH

2001-2009

Principal Software Engineer in High Performance Computing

Individual contributor to advanced development projects in the area of High Performance Computer Measurement and Analysis.

- Created a suite of Linux X Windows-based GUI tools to display cluster-wide or individual node performance data collected from CPU and chipset hardware performance counters.
- Worked on a low impact Linux daemon to program, multiplex, and collect hardware performance counters from Intel and AMD CPUs and I/O chipsets.
- Developed a Web-based interface to performance reports that show CPU usage for individual executables, procedures, high-level instructions and assembly code instructions. Developed using a MVC architecture.

Individual contributor to advanced development projects in the area of Computer Languages.

- Became knowledgeable of the current technology and issues in the field of Bioinformatics.
- Worked with faculty and students at Northeastern University to explore language possibilities for Biologists.
- Created a toolkit that contained the most commonly used Bioinformatics applications and made it available for the Linux/Alpha, Linux/IA32 and Ultrix/Alpha operating systems.
- Developed a C++ library of objects and functionality for interacting with Bioinformatic data sources, web pages, and utilities

Compaq Corporation, Littleton, MA

1998-2001

Principal Software Engineer in Web Services

Project leader for various Human Resource web applications moving key human resources processes to self-serve web pages.

- Designed a framework for a suite of HR web-applications that significantly reduced the time of developing similar applications.
- Worked with clients extensively to gain feedback on new processes and to learn the particular needs of the client.
- Applications were done using Active Server Pages using VBScript on the Server and JavaScript on the client, with embedded objects written in either Visual Basic, or Java.
- Developed a web-based yearly Employee Opinion Survey delivery system producing individualized surveys available in 19 languages. Increased participation from 45 to 85%.
- Designed and implemented a web-based Survey Creation and Delivery tool that significantly reduced development time for the yearly Company Employee Opinion Survey
- Allowed for the delivery of many quarterly group-specific pulse surveys.
- Designed and developed a self-service web application to enable managers to directly determine and submit total compensation plans for their employees.
- Eliminated the HR manual entry process by updating PeopleSoft directly.

Digital Equipment Corporation, Marlboro, MA

1987-1998

Principal Software Engineer (1987-1998)

Project leader in the company's Internet application development group designing and implementing both internal and external web applications.

- Applications were developed using CGI scripts in C, C++, PERL, and the beta release of Active Server Pages.
- Researched and disseminated information about new tools and techniques for web application development that kept the group up to date.
- Researched the capabilities of external testing applications and oversaw the internal implementation of an effort to stress test our web-based applications.
- Designed and developed the company's total compensations planning system as a web application that provided a consistent, easy to follow process substantially reducing the time each manager spent on planning and eliminated HR manual entry.

Project leader for Customer Services advanced development projects.

- Developed a rule-based expert system to identify and suggest repairs for VMS and UNIX operating system crashes that significantly reduced customer downtime and allowed many more support specialists to be able to do the job. The application was written in C and used a relational database for knowledge storage and rule matching.

Researched and piloted applications that brought Artificial Intelligence techniques to bear on Customer Service applications.

Digital Equipment Corporation, Marlboro, MA
Senior Software Engineer (1984-1987)

1984-1997

Researcher in the Company's Artificial Intelligence Technology Center.

- Developed a GUI-based network layout program that was object-oriented and highly customizable providing the framework for different graphic programming tools. The application was written using C++ and X-windows Motif.
- Designed a GUI-based knowledge capture application allowing users to represent their knowledge as a directed graph that the system translated into a C-based application. Significantly reduced the effort to create knowledge-based applications. The application was written in C++ and X-windows Motif.
- Launched the Company's first externally available expert system language, Foxglove, written in Lisp.
- Consulted with external customers on the cost savings potential of applying expert systems technology to their problems.
- Developed many prototype expert systems for diagnosing hardware and operating system problems that led to future released applications. Languages used included Lisp, OPS5, Expert, and SOAR.
- Developed and delivered courses on Knowledge Engineering and presentations to customers on a variety of topics in the field of Artificial Intelligence.

EDUCATION

M.S., Computer Science/Artificial Intelligence, Indiana University

B.A., Computer Science and Physics, Indiana University