

MATTHEW CRAIG
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OBJECTIVE:

(software engineer) Position as a developer in a UNIX/Linux environment. Duties to include project design, planning and programming, and possibly system administration and systems analysis.

(Linux admin) Position as a UNIX/Linux system administrator , but also including the challenge of project design and programming.

KEY SKILLS:

Languages:

PHP SQL UNIX shell scripting PL/pgSQL Java Perl JavaScript

Related Technologies:

XHTML XML CSS XMLHTTPRequest

Applications:

PostgreSQL Apache Slony-I Postfix Linux Virtual Server SAMBA MySQL

HylaFax PGP Open Office Tomcat VPNs Nutch

Platforms:

Linux (Gentoo, Smoothwall, SuSE, RedHat) FreeBSD UNIX(Solaris)

WORK EXPERIENCE:

Lead Programmer/System Administrator

Leade Health, Inc. July 2000 – Present:

Designed and implemented a full-featured, web-based Health Coaching System on Linux/Apache/PHP/PostgreSQL for our distributed network of coaches (in 2000 Leade's Health Coaching system was still based on a single MSAccess database.)

Led the team in 2005 which rewrote the system, updating it to be standards-based and improve performance and interactivity through a JavaScript interface talking to a PHP backend through XMLHTTPRequest.

Other major projects:

Installed and administered Leade's initial systems; web and database servers, an office file server, a fax server, and several firewalls.

Added database redundancy, in the form of Slony-I replication; and

Added web site failover with 2 redundant load balancers serving requests through four actual web

servers, both in 2006, with assistance from one other sysadmin.

Designed and implemented a web-based report generating tool with web-based editing and output in PDF format.

Provide training tips and user support for around 30 non-technical users of the Coaching Database.

Programmer/Researcher

with Prof. Dragomir Radev at U of M Aug. 2003 - April 2004:

Participated in research involving using topical web-crawlers and document surrogates to reduce bandwidth usage during real-time web searches.

Technologies used included the open-source search engine, Nutch (www.nutch.org), which is a customized Java web-crawler, document summarization software developed at U of M, and Perl code, both home-grown and CPAN modules, to analyze our results.

Programmer

Spring Management Aug 1999 - June 2000:

Lead programmer on an Electronic Medical Record system. Worked with Project Manager, who had medical office experience, to create a web-enabled system with which a doctor's office could manage all patient care.

Project coordinator on the city of Toledo's Y2K desktop update team.

EDUCATION:

University of Michigan, MS Computer Science and Engineering, Dec. 2003

Indiana University, Bloomington BA Physics/German May 1995

Year abroad **Universitaet Hamburg** (Germany) 1992-1993

RELEVANT EDUCATION:

Operating Systems: Internals of an OS including processes and threads, scheduling, memory management and networking.

Artificial Intelligence: Familiar with many of the general paradigms of AI, including planning, various search techniques, constraint satisfaction. Experience programming in LISP and Prolog.

Algorithms: Knowledge of all basic CS algorithms. Understanding of designing and implementing efficient algorithms.

Natural Language Processing: Familiar with parsers (both statistical and grammatical), taggers, stemmers, finite state machines used in NLP.

Real Time Systems: Knowledge of designing RT systems, scheduling, fault tolerance, timing/clocks, and guaranteed performance.

Information Retrieval: Web search, social networks, methods of calculating document relevance.