

Joseph T. Peppersack

Systems Architect

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Summary

- A creative hands-on leader with over 21 years experience, exceptional technical skills, and a business-focused outlook
- Background in both software development and systems operations, spanning diverse industries, gives an unique perspective on how to create and deploy highly scalable, reliable, and secure systems that deliver a positive return on investment
- Extensive career commitment to staff development and team building through mentoring, teaching, and knowledge transfer
- Open to permanent technical leadership positions as well as long and short term consulting opportunities

Key Accomplishments

Leadership

- Led initiative to adopt and leverage distributed "big data" technologies - such as Hadoop, Hive, and HBase - to replace traditional RDBMS-based applications
- Re-architected data warehouse from a relational model to a key-value based design; developed tools and procedures to migrate from Oracle to HBase
- Performed a feasibility study and cost/benefit analysis to re-engineer a troubled client-server system using a scalable, distributed, cloud-based architecture
- Lead database designer for AIMPages.com, AOL Member Directory 2.0, and the tagging & commenting infrastructure used by multiple AOL properties
- Lead database designer for Benelogic, a web-based benefits enrollment system

Software Engineering

- Designed and implemented multiple Map-Reduce applications
- Developed reporting application using Perl and Amazon SimpleDB
- Developed tools to generate XML sitemaps for millions of user-created web pages
- Developed ETL, administrative, and reporting tools in Perl, C, and Unix Shell
- Extended and maintained AOL's "master control" system for systems operations
- Wrote and tuned stored procedures for Sybase, MS-SQL, MySQL and Postgres
- Designed generic security and authentication module for web-based applications

Systems Operations

- Administered 50+ replicated Sybase, MS-SQL, Postgres, and MySQL servers supporting the AOL.com portal site as well as other AOL branded properties
- Administered 25+ multi-terabyte databases supporting ENTREZ and PubMed, the world's largest public repositories of genomic data and medical journal abstracts

Clients and Employers

Catalist	Lead Developer - Distributed Computing
GuestMetrics	Sr. Systems Architect
Boston University - CDIA	Instructor
America Online	Sr. Systems Engineer, Sr. DBA
National Library of Medicine - NCBI	Sr. Sybase DBA
Benelogic	Sr. Database Architect
Verizon Communications	Sr. Software Engineer
Small Business Administration	Sr. Database Architect
Maryland Insurance Administration	Lead DBA
Los Alamos National Laboratory	Sr. Programmer / Analyst
United States Air Force	Programmer / Analyst, Software Tester

Proficiencies

General

- Hadoop / MapReduce
- Distributed Computing
- Cloud Computing (AWS/E2C)
- NoSQL Architecture
- Functional Programming
- Scalability & Capacity Planning

Languages

- Perl (Mason, DBI, mod_perl)
- SQL (all major dialects)
- Unix Shell (bash, csh, awk)
- [X]HTML, CSS, JavaScript
- XML and XSLT
- C
- Java (dated)

Databases

- HBase and Hive
- Amazon SimpleDB
- Sybase ASE, IQ, and Replication Server
- BerkelyDB
- MySQL
- Postgres

Education

University of New Mexico
Computer Engineering
8/1993 - 5/1995

C.C. of the Air Force
Computer Science
10/1989 - 2/1993

Other Skills

Photographer
Portfolio available on request