# Theodore R. Haining

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#### EMPLOYMENT OBJECTIVE

A software engineering position relating to system software engineering, software life cycle management and development of applications used with operating systems, virtualization/cloud computing, database management systems, and data storage devices.

### **EDUCATION**

**University of California, Santa Cruz, CA.** Ph.D. in Computer Science, August 2000. Interests included: I/O subsystems, operating systems, systems programming and performance, database engineering, database administration, compiler design, and object oriented programming.

University of California, Santa Cruz, CA. Master of Science in Computer Engineering, June 1993. Concentrations in: computer architecture, parallel processing, computer programming, and computer graphics.

**Rensselaer Polytechnic Institute, Troy, NY.** Bachelor of Science in Electrical Engineering, May 1991. Studies emphasized logic design, computer architecture and operating systems, discrete time systems, and man-machine interfaces.

### **EXPERIENCE**

**Principal Member of Technical Staff, Oracle Corporation.** November 2004– Designed and developed software service for off-site disaster recovery of VM-hosted customer data and applications. Performance tested multi-tier Oracle 11*i* Applications clusters running on 32-bit and 64-bit Linux for use in Oracle's database and applications hosting business with Mercury Load Runner 8.0. Created and tested baseline Xen virtualization environments for internal use in Oracle OnDemand. Installed and administered systems running multiple flavors of enterprise Linux, and Oracle database and applications with Network Appliance 960 and 6070 filers.

Senior Member of Technical Staff, Oracle Corporation. October 2002—November 2004. Coordinated evaluation tests of Oracle 9i RAC with new I/O technologies (such as ISCSI) with storage and network equipment vendors. Developed network communications layer and configuration file parser for Oracle Simulator, a C-based, cluster performance and simulation testing tool used by storage OEM partners and Oracle Linux test engineers. Co-authored white papers on use of Oracle 9i database with Linux using ISCSI and installation best practices for RAC on Linux. Listed as co-inventor on a patent application for Oracle Simulator.

**Member of Technical Staff, Oracle Corporation.** September 2000–October 2002. Contributed to performance and code review improve availability and reliability of Oracle Cluster Manager for Oracle 9*i* RAC. Designed and developed system automation frameworks for automated database backup, restoration, cloning, and installation using a mix of Perl, shell scripts, and custom C programs. Administered Brocade and EMC storage area network for internal testing.

Research Assistant and Programmer/Analyst IV, UC Santa Cruz. Summer 1993–Fall 2000. Maintained a geographically distributed network of Linux, FreeBSD, and BSDi systems that collected weather and ocean data for environmental research using a mix of wired and wireless network links. Developed a C++-based disk and cache workload simulation program. Developed and implemented core programming interfaces to handle data acquisition, processing, and communication in near-real time. Supervised student employees.

## **CORE COMPETENCIES**

**Programming** - Experience with C, C++, Perl, HTML, SQL, and shell scripts.

**Software Experience** - C programmer for 8 years. C++ programmer for 3 years. DBA and SQL programmer with Oracle databases for 12 years. System administrator of Unix-like operating systems (mostly Linux and BSD variants) for 11 years. Administered Network Appliance filer for 3 years. Operated fibre channel storage area network using Brocade Silkworm switch and EMC Symmetrix hardware for 2 years. BSDi and Linux kernel and driver module debugging experience. Experience administering Apple OS X for 2 years.