Marc Abramowitz

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Experience:

VMware – Host Agent Team — Sunnyvale, CA

Staff Engineer — Aug 2007 to present

- Host Agent is a multi-threaded C++ server that processes SOAP API requests. It runs on VMware ESX Server (essentially Red Hat Enterprise Linux), Windows, and VMware ESXi (a proprietary hypervisor).
- Reduced the size of Host Agent executable by 3% by analyzing symbols and locating wasteful practices.
- Reimplemented legacy vmware-cmd tool in Python. Added new features including an interactive command shell with command completion and history. The new code base is highly modular and extensible and has a suite of over 300 unit and integration tests.

Yahoo!, Inc. – Tiger Team — Sunnyvale, CA

Principal Software Engineer and Engineering Manager — June 2005 to Aug 2007

- The Tiger Team at Yahoo is dedicated to providing highly skilled, senior engineers to a variety of projects. Tigers provide short-term resources to product engineering teams that need additional resources for projects deemed important by engineering VPs.
- Extensive work on the infrastructure for Yahoo's Project Panama, a company-wide initiative to develop a new ad-serving platform with more powerful features and a lower maintenance cost. C and C++.
- Wrote XUL and JavaScript code for a major rewrite of the sidebar and bookmark synchronization code in the del.icio.us Bookmarks Firefox extension.
- Developed C and C++ code for server components for serving Yahoo Publisher Network ads in syndication feeds (e.g.: RSS, Atom). Came up with the idea of using plugins for popular blog software to make it easier for publishers to add Yahoo Publisher Network ads to their pages and feeds and then developed such plugins in PHP and Perl for the WordPress and Movable Type publishing platforms.
- One of three managers in Tiger Team, responsible for monitoring projects, giving technical advice, managing up to 7 direct reports, and recruiting new team members.
- Won Platform Organization's "You Rock!" award.

Yahoo!, Inc. – Yahoo! Personals — Sunnyvale, CA

Senior Software Engineer — May 2002 to June 2005

- Developed photo cropping system, consisting of Ajax JavaScript web interface for editing and reviewing photos, backend data store, photo upload, and automatic face detection using Intel's OpenCV library (which I ported to FreeBSD).
- Developed backend system for storing data for personality test results. This was a client/server RPC-like system that used a Yahoo-proprietary library for network transport and MySQL for data storage.
- Developed numerous mechanisms for detecting and preventing abuse of the site by spammers. Used PHP, Perl, and Bogofilter.
- Periodically served week-long 24×7 on-call (pager) duty.

Fireclick **Los Altos, CA**
Senior Software Engineer July 2000 to May 2002

- Developed Java servlets for Netflame application service.
- Developed suite of essential tools for administration of Netflame application service.
- Developed C++ NSAPI plug-in for fast, flexible control of cacheability headers with Netscape Enterprise Server on Solaris and Windows NT platforms.
- Served as group expert in Java servlets, UNIX, shell and Perl scripts, iPlanet Web Server, and SSL certificates.
- Performed system administration tasks for Netflame service, consisting of 12 Solaris machines (including two Oracle databases) running at two data centers.
- Maintained automated build environment on two Solaris machines.

Digidesign **Palo Alto, CA**
Software Engineer Aug. 1998 to May 2000

- Developed all software for MasterList™ CD versions 2.1.1, 2.1.2, and 2.2.
- Developed features and fixed bugs for Digidesign's flagship Pro Tools® software.
- Led software development for Pro Tools 5.0.2 and Pro Tools Free releases.
- Developed Pro Tools driver for Control|24™ hardware console in C++.
- Designed and developed cross-platform (Win32/MacOS) engine for burning audio CDs and drivers for several popular SCSI and ATAPI CD burners.

Stanford University **Stanford, CA**
Research Assistant - Computer Systems Lab June 1996 to June 1998

- Developed tool in Tcl/Tk and C++ for viewing graphs of event-based systems.

Lawrence Livermore National Laboratory **Livermore, CA**
Institute for Scientific Computing Research Aug. 1995 to June 1996

- Extended FORTRAN and C code for simulation of human hand joint kinematics.
- Developed C and C++ software for processing & viewing computer tomography data.

New Jersey Institute of Technology **Newark, NJ**
Chemistry Department June 1991 to Sept. 1991

- Developed software for calibration and data collection from a spectrophotometer.

Education:

Stanford University **Stanford, CA**
Master's degree in Computer Science June 1998

Binghamton University **Binghamton, NY**
Bachelor's degree in Computer Science Dec. 1995

Side projects:

Yahoo! Music Jukebox plugins

- Wrote three plug-ins for the Yahoo! Music Jukebox using C# and .NET 2.0.
- Export2Excel
- MouseRemote
- YME Jabber Control

Yahoo! Briefcase Widget

- Wrote a widget for the Yahoo! Widget Engine (using JavaScript) that allows drag and drop access to the files in a user's Yahoo! Briefcase.

Yahoo! Search Sidebar for Firefox

- Wrote a Firefox extension (using XUL and JavaScript) that performs Web searches in the sidebar using the Yahoo! Search Web Services API.

Emacs Poker

- Wrote a simple single player poker game that runs inside Emacs using Emacs Lisp.

Publications:

How to run Linux inside Linux with User Mode Linux
Linux.com, January 11, 2007

Installing Linux-VServer
Linux.com, January 8, 2007

Creating virtual private networks with tsocks and VTun
Linux.com, June 12, 2006

Accelerating OpenSSH connections with ControlMaster
Linux.com, June 6, 2006

Faster remote desktop connections with FreeNX
Linux.com, May 18, 2006

A Computational Model of Human Hand Kinetics Using AVS
Lawrence Livermore National Laboratory, Fall 1995 SERS abstracts and research papers

Texture Mapping in a Real-Time Terrain Rendering Environment
Northeast Parallel Architectures Center (NPAC) Technical Report, REU research papers, August 1995

Pull-Down Menus - for Atari BASIC programs (BASIC program and accompanying article)
Antic Magazine, March 1990

Red Squares - Atari Tetris clone (BASIC program and accompanying article)
Antic Magazine, July 1989