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The Veritable Bugeater

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Objective:

I am looking for a position where my skills in Software Development Environment Tools, Make, SCM, and Release Engineering will allow me to make a significant contribution to the success of a company.

Employment History:

11/19-05/20 Fungible / Sr Tools Engineer

Help maintain and enhance the custom build and test environment. Fixed an major issue where multiple builds could land in the same directory. Made it handle collisions cleanly and converted it to use a different key that couldn't collide. Took a log browser script that was having issues and needed enhancements, added RegEx matching and color highlighting based on what matched. Moved it into a separate process so it wouldn't bog down other functions. Helped Software Engineers solve problems with the build environment as well as other software related issues. Trained engineers on Zoom usage.

2/17-10/19 Knowles / Sr Staff Engineer. DevOps

Manage Perforce install, including audit installed clients, users, maintain replicas, and rewrite backups. Manage Jenkins clusters, enhancing Projects to Engineer's needs. Writing build scripts to interact with Jenkins. Manage addons and settings. Manage FlexLM servers. Install new servers, install new license keys, compare old and new license keys. Assist Engineers in solving build, test, and release issues. Write tools to help them be more efficient. Manage all the DevOps servers. Manage software installs, upgrades, and maintenance. Manage software license upgrades. Work with management to reduce license costs as much as possible.

5/13-11/16 Tintri / Build Architect

Took ownership of the Build Tools. Both a homegrown Django based build environment (E2E) installation. The E2E system was badly suffering from neglect and required lots of work to make it more stable and to add new product support. The SCM tools were non-existent. I wrote several scripts to automate a number of basic Build / Release functions. Eventually these scripts were turned into a self-service portal for the development teams. Worked with the QA team to enhance the interface between the E2E scripts and the test infrastructure also called E2E.

Modified the E2E build scripts to create a self-healing cluster of build machines that included monitoring and critical issue notification.

I updated the build archival system to handle many more builds as well as providing a staging area for release builds.

In interfaced with local QA and Engineering teams as well as the teams in India.

Providing training for the Build / Release processes as well as being a liaison to many other teams in Engineering and across the company.

4/10-5/13 Vudu Inc. / Software Tool Smith, Software Configuration Management, Release Engineer

Software Tools Engineer: Migrate the build environment to BuildBot. Enhance BuildBot to suit our needs. Write other Python and Perl scripts to support the BuildBot environment. Write, run, and maintain numerous scripts to perform various tasks. Write a process to convert video from the primary format to other formats.

SCM Engineer: Maintain the Perforce installation. Update to newer Perforce releases. Setup replication. Rewrite backup process.

Release Engineer: Manage 250+ builds on BuildBot. Work with developers to add new builds. Help developers solve build issues. Work with QA to facilitate testing. Work with management to coordinate releases.

12/04-3/10 VMware / Software Tool Smith, Software Configuration Management, Release Engineer

SCM Team: I worked on tools to automate the administration of the Perforce repositories. I wrote a Perl interface to Perforce that made it trivial to work on multiple Perforce servers at once. I rewrote Make and Scons build tools to enhance the ability to do builds in parallel. The result for one team was better than 50% build time reduction using my changes and IncrediBuild on Windows!

Release Engineering: I was tech lead for the Release Engineering team. I wrote a number of tools to automate many parts of the administration of builds. I maintained and enhanced the main build scripts for several years. I maintained and enhanced the continuous build system. Maintaining the CB build system was a full time job when I inherited it even though it was only running builds for about 15 branches. When I was done maintenance was moved to the Build Gurus as a small part of their task with 45+ branches. I taught the Release Engineering Boot Camp for new hires.

5/01-12/04 Sanera Systems, McDATA Corp. / Software Tool Smith, Software Configuration Management, Release Engineer

Software Tools Engineer: I greatly enhanced the GNUMake build environment. I wrote a regression test queue system with web and command line interfaces. I wrote a web tool to ensure code review and allow much better project management control of the ClearCase system.

Software Configuration Management: I installed and managed ClearCase myself for 2.5 years. I trained users, performed all vobadmin duties, and was the support person for 40+ engineers. I managed 3 release branches and performed daily builds on all three and a number of other team branches. I wrote a script that automatically generated a web page (TWiki) that showed ClearCase usage.

Release Engineering: I wrote all the build scripts and automated the daily builds. I wrote a tool to generate automated release notes. I wrote a number of other scripts used for gathering release information. I kept a web page (TWiki) with information about all the releases.

5/00-4/01 PIXO Inc., Release Engineer / Software Configuration Management.

Senior Release Engineer: Solely responsible for all the software builds. I wrote all the build automation tools that were used for the builds. I typically had 5 - 10 builds per week.

Senior Configuration Management Engineer: I was responsible for the Perforce server and tools. I gave classes on Perforce for all new engineering hires as needed. I was responsible for the four build machines. I was RE lead when we finally hired another release engineer to help with builds.

1/95-5/00 Synopsys, Release Engineer / Tools Support Engineer.

Release Engineering Lead. First pass Release Engineering. I wrote many of the current build and release tools. I updated most of the release tools to work in a ClearCase environment. I was part of a team that migrated most of the Synopsys software into the ClearCase environment. I planned and implemented a new process for releasing software from the build environment to the test and release environment using Perl. I lead a team of cross-group integrators, helping resolve technical issues that span multiple products and groups.

1/94-12/94 Sun Microsystems, Release Engineer. (Contract via Taos Mountain Software)
Solaris 2.4 Release Engineering, x86 platform.

7/93-12/93 Between Jobs

Worked at home on my house. Spent time with my two young children.

1/89-6/93 Frame Technology Corporation, Software Engineer.

HP/Apollo porting specialist. X/Motif software development. Shell script expert. I worked three years in the X/Motif group doing HP, Apollo, and other platform porting. I also did X/Motif programming. I quickly became the shell script guru. For the 4.0 release I redesigned all of the dialogs to closely follow the Motif 1.1 style guide as well as rewriting the tools used to create and design the dialogs. I helped the X/Motif group implement CVS revision control and a highly portable GNU Make build environment that was later adopted by all of engineering. I did many other misc. projects ranging from porting Frame's text and graphics filters to HP, Apollo, and other platforms to format conversion and editing of bitmaps used in the GUI.

3/86-1/89 Silvar-Lisco, Software Engineer .

I enhanced and maintained netlist interface programs for a variety of layout and simulation products. I developed a source control and development system using each platform's *make* utility that ran on multiple platforms that I later found to be very similar to *Imake*. I ported the system integration software to two new operating

systems (Domain/OS SR10 and SunOS 4). I created a development system that ran on both Apollo and Sun platforms simultaneously.

8/85-2/86

Time off.

I courted the lady I later married and am still married to.

12/84-7/85

Digital Equipment Corporation, Principal Software Design Engineer.

I researched UNIX based netlist extraction programs for a printed circuit board design system. I also researched the DEC Modula-2 compiler for the purpose of teaching the language to other programmers. I maintained, developed, and enhanced various CAD programs and other system programs.

5/82-11/84

G.E. Calma Company, Software Design Engineer.

I developed application programs for a printed circuit board computer aided design system. I developed system utilities and tools for software development support including a system security login program, an electronic mail system, a UNIX CShell like command language interpreter for the Data General Eclipse platform, and other misc. utilities. I did the release engineering for my engineering group.

Current Skills:

- Fluent in Perl, Python, C-Shell, and Bourne shell. I am considered a Perl expert.
- Very proficient in Perforce and ClearCase administration and use.
- Proficient in Mercurial use.
- Recent Git experience.
- FlexLM license management.
- Learning Jira and Confluence administration.
- Very experienced in software development environment design and implementation. I have an eye for optimization and a knack for being able to remove exceptions thereby reducing special cases and simplifying the process.
- Crossplatform development environment design and enhancement. I have always worked with so many different UNIX platforms it is natural to write very portable code.
- I have ported or helped port C programs to the following UNIX platforms: Linux, HP, Apollo, Sun, IBM, DEC, SGI, SCO, DG, Sony, MIPS, iABI, Ceta, and many others! I have also ported to the Windows NT4 on Intel and Alpha hardware.

Education:

B.A. Computer Science¹, June 1981
University of California, Berkeley

References:

Available upon request.

¹ Equivalent.