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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:

02/22-12/22   Addepar / Sr Sofware Engineer II Infrastructure Platform Tools

Implement "Arcade", the Addepar platform on AWS for ease of user, ease of maintenance, high security, scalability, and speed to bring up and modify. This was built to support the new Commercial Sandbox product.
I worked on the Python3 Boto3 tooling, Kubernetes integration, Docker, and other AWS tooling.
Once the project was working, I wrote much of the training material and documentation and trained engineers how to create, run, and integrate to the tools.
I also worked on Bourne shell scripts and created Python based tools to automate engineering tasks related to Arcades.
We used Git and Git Hub as our SCM tool.

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

Help maintain and enhance the custom build and test environment. Fixed a 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 RegExp matching and color highlighting based on what matched. Moved it into a separate process so it wouldn't bog down other functions and run out of memory.
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, 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 which used the same basic structure.
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.
I interfaced with local QA and Engineering teams as well as the teams in India.
Provided 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: Migrated the build environment to BuildBot. Enhanced BuildBot to suit our needs. Wrote other Python and Perl scripts to support the BuildBot environment. Wrote, ran, and maintained numerous scripts to perform various tasks. Wrote a process to convert videos from the primary format to other formats.
SCM Engineer: Maintained the Perforce installation. Updated to newer Perforce releases. Setup replication. Rewrote the Perforce backup process.
Release Engineer: Manage 250+ builds on BuildBot. Worked with developers to add new builds. Helped developers solve build issues. Worked with QA to facilitate testing. Worked 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 part of 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. This was still in use by at least one team 7+ years later.
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 user 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 maintained 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 all the build machines. I was RE lead when we finally hired another release engineer to help with the expanding number of 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 environments 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.
Further automated the release process, reducing the time from 7 days of very busy work to 5 days of much lighter work.

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, Bash, and Bourne shell. I am considered a Perl expert.
- Recently worked with AWS, Docker, Kubernetes, Boto3, and others related to the AWS infrastructure.
- Very proficient in Perforce and ClearCase administration and use.
- Proficient in Mercurial use.
- Recent Git experience.
- 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, Cetia, and many others! I have also ported to the Windows NT4 on Intel and Alpha hardware.

Education:

B.A. Computer Science[1], June 1981
University of California, Berkeley

References:

Available upon request.

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1   Equivalent.