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Is complexity overwhelming you or your customers, and how do you handle the relentless trade-offs, demands, and changes in a modern technological marketplace?

Can you find someone who meets all of the skill requirements, or would you benefit more from someone with adaptable qualities?

- Eager and rapid learning, assessing new approaches and embracing solutions
- Grasps and applies both details and the big picture in new contexts
- Translates between the many silos of our modern world with depth but in common language
- Adapts to multiple project roles and changing business needs
- Draws insight from diverse sources to innovate

These multipotential tendencies reflect my passion for diverse learning experiences and challenging work. I enjoy the rigors of formal mathematics, and have broad academic roots spanning the arts, social sciences, sciences, engineering, and more. I have been privileged to learn from top instructors at institutions including the University of Illinois High School, Albuquerque Academy, and Case Western Reserve University. Outside of the classroom, I have been steeped in a learning environment of both family and colleagues who have engaged in significant work over the generations from my grandfather who was a Manhattan Project scientist to today's top supercomputer engineers. Outside of work, I continue to find new materials and subjects to explore in my free time.

Rooted in renaissance-style early education and armed with degrees in Computer Science and Psychology as well as deep backgrounds in Mathematics, Biology, Chemistry, and significant exposure to many other subjects, I have been able to apply an unusual and sophisticated set of learning and thinking skills into a career that has paralleled the origins and development of the modern DevOps movement. But while steeped in distributed computing and automation, I am reluctant to advertise it as DevOps today, because it has only occasionally intersected with the big public cloud providers associated with the term "DevOps". I have learned deeply from both the successes and failures of companies of all sizes. I have observed with interest how success turns into failure, but more importantly learned how to turn failure into success.

I stand ready today to help teams and organizations embark on a great pilgrimage. From finding a clear and common vision towards the future to learning how to take each new step into the unknown, I can work with a broad diversity of people in different roles and positions, helping them to develop more productivity, reduce toil and friction, value and re-frame tension and conflict, accept challenges, learn from failure, and grow genuine corporate agility, resilience, and longevity. While leveraging technology and automation may certainly be a big part of this journey, I primarily focus on the problems to be solved.

When looking at genuine success, there are not magic bullets or secret formulas, but rather time, effort, and the ability to find alignment in the ideas that drive your team's journey. Then you must successfully execute those ideas. And success is not a destination but it is made up of certain moments in pursuit of a greater destination. My goal is to come alongside and teach your team or your customers to find their own pilgrimage, and help make that a journey from success to success.

Technical Expertise & Proficiency

DevOps Tooling: BitBucket, GitHub, Jenkins, Artifactory. Integrations: Slack, JIRA, Confluence, Sonar Qube, Snyk.

Hardware Platforms: Many varied Intel x86 and x64 platforms, PPC Macintosh, IBM POWER PC, Sun Sparc / Sparc64.

Physical Networking: Ethernet, FibreChannel, Token Ring, Fiber Optic, serial and parallel communications.

Virtualization / Containerization: VMWare ESXi, Workstation, and Server, Linux KVM/QEMU/libvirt, VirtualBox, Docker, IBM POWER LPAR virtualization, and primitive pre-containerization UNIX process isolation methodologies.

Networking Technologies/Methodologies: LAN and WAN routing, SAN, bridging, firewalls, VLAN, VPN, multi-homed and clustered network configurations, extensive experience with complex physical and logical topologies with multiple simultaneous physical formats and network protocols.

Storage Technologies: IDE, SCSI, SAS, SATA, and FibreChannel storage systems, including multi-pathed, multi-initiator, SAN and direct attached configurations. Extensive use of LVM, redundant LVM, hardware RAID, software RAID configurations. NAS storage and backup solutions. Multiple tape and enterprise tape library backup systems.

Operating Systems: Linux (Early free to current Red Hat Enterprise Linux [RHCE Jan. 2003], Fedora, SUSE, Debian, Ubuntu, Mint), AIX 4.x and up, SunOS 4.0-Solaris 10, HP-UX 11.x, Early DOS Windows 11 and Server versions.

Programming Languages: Primarily C, C++, [Sparc, x86 and 68000 Series] Assembly Languages, Bash, korn, sed, awk, PERL, expect, SQL. Also varied levels of familiarity and experience with many other compiled and scripting languages including python, PHP, java, javascript, HTML, pascal, and BASIC.

Process Methodologies: Application and optimization of ISO processes. Continuous improvement (Kaizen). Continuous integration, continuous delivery and continuous deployment. Internal security process design, maintenance, and implementation. Integration of external security process requirements. Disaster recovery. Various approaches to software testing and quality assurance.

Systems methodologies: Operating system and database, and file systems backups, conversions and recovery including data recovery, basic data forensics and operating systems reconstruction. P2P, P2V and V2V system conversions. VM migration and reshaping. Dynamic virtual resource allocation and management. Basic and commodity clustering and high availability (fail-over and load-sharing). Distributed computing.

Work History

Zetron (contract position with Triple Crown Consulting) **Feb. 2024**
DevOps, Docker, and Kubernetes instructor:

- Taught a week-long, all-day course on Docker, Kubernetes and DevOps concepts for Zetron's global staff product developers.
- Custom developed the course with Zetron management in two weeks.
- Collaborated with Zetron subject matter experts to pilot the use of container and container orchestration technology in product development.

DevOps Research and Writing (independent unfunded development) **2019-present**

- Analyzing core principles behind DevOps and related cultures/practices to understand the underlying factors leading to success and reasons for failure.
- Investigating the application of these principles to other disciplines, and seeking opportunities for cross-pollination learning
- Engaging in discussions with DevOps leaders and practitioners to gain insights and share best-practices and find opportunities for continuous improvement.
- Exploring parallel and contrasting practices with professionals from various fields to produce an enhanced interdisciplinary understanding of productive cultures and practices.

Cray – HPE Cray products (contract position with Triple Crown Consulting) **2018-2022**
Firmware and BIOS teams DevOps liaison and build engineer:

- Integrated a modern DevOps team supporting builds across the full Cray supercomputer software stack with the firmware and BIOS development teams developing and maintaining these software products and supporting software aspects of Cray hardware bring-up.
- Defined CI/CD pipelines fitting the Cray software stack development model.
- Progressively integrated software and hardware testing and security compliance into the pipelines.

IBM Security Software (contract position with CDI Corp.) **2012-2017**
IBM LDAP, Access and Identity products, production build engineer:

- Co-managed all aspects of production build engineering and support as part of a two person team.
- Modernized a neglected build lab, reducing technical debt and improving stability and resilience.
- Eliminated most outages by implementing non-disruptive redundancy degradation and restoration processes.
- Enhanced lab-wide automation, evolving basic build cycles into modern CI build practices.
- Transformed the lab with automated infrastructure deployments.
- Saved our division millions of dollars because our operations required two people and the occasional help of a few people outside the team, rather than three or four departments and dozens of full-time staff.

IBM/Tivoli (contract position with CDI Corp.) **2007-2012**
Access Manager for Operating Systems L3 support, software engineer:

- Earned high praise from my manager: “We give you many of the hardest problems because everyone else would give up where you keep going until the problem is solved.”
- Proved the depth of my ability to learn and solve problems by mastering a deeply technical and complicated operating systems security middleware product.
- Acquired proficiency in Sparc hardware architecture and assembly language within weeks, enabling me to reverse engineer system dumps and debug complex interaction patterns between our and third-party products without their source code.
- Updated and refined sophisticated build process to extend platform support to newer versions of Linux, extending the product’s compatibility, lifetime, and build integrity.

Sony Toshiba IBM (STI) (contract position with CDI Corp. and IBM Global Services) **2005-2008**
AIX/Linux Administrator and Help Desk:

- Managed an automated deployment system derived from our system test team’s prior work at IBM, supporting the organization’s simulation farm and CAD workstations.
- Implemented systems security and intellectual property security controls for the organization.
- Developed a customized Apache build for CI/CD style web server deployment.

U. S. Court Administrative Office (contract position with PEC Solutions) **2003-2005**
Linux Systems Integration Specialist:

- Led the training of the Linux support team, and the migration process development team.
- Spearheaded the development of an automated migration process, enabling U.S. federal court server administrators to seamlessly transition Solaris to Linux.
- Established and tested new administrative standards for the court servers.
- Provided the courts with what they described as “the smoothest and easiest major administration process we have ever had to perform.”
- Identified and resolved a critical issue in court software design, significantly reducing server restore times from weeks to days.

Independent Computer Consultant **2001-2003**

- Delivered a range of computer hardware, software and network services to Austin area clients, improving or establishing reliable IT operations.

EriQA Labs **2000-2001**
Co-founder / Systems Engineer:

- Co-founded a testing and quality assurance company offering fully automated testing services to enterprise clients, leveraging methodologies developed at IBM.
- Unfortunately our company launched into the “dot-com-bust” and did not reach viability.

IBM **1997-2000**
Distributed Computing, System Test Engineer:

- Leveraged insights from Intel to co-develop a robust program of systems testing automation alongside a mentor with 40 years of experience at IBM.
- Developed continuous integration (CI) system joining development middleware builds with systems test application software.
- Built an automated test platform and deployment system, reducing installation and configuration times from weeks to hours and ensuring platform level repeatability per test.
- Developed automated and distributed test tooling for executing enterprise-scale systems tests across numerous systems with ease and repeatability.

Intel (Co-op position) **1996-1997**
Pentium [Orig/Pro/MMX/2] Sort Engineer:

- Engaged in a Kaizen/lean manufacturing system, fostering continuous improvement of quality and efficiency while lowering production costs.
- Automated engineering tasks, enabling computers and technicians to handle most routine work, allowing engineering to focus on higher level expertise and innovation.