Al DiTullio
Sr. Software Systems Engineer

Langhorne, PA - Email me on Indeed: indeed.com/r/Al-DiTullio/fdb3bb3259b6cd59

• Extensive experience in the design, development and implementation of systems utilizing IBM Information Server, Linux, PowerPak-Segger RTOS, iOS, IBM AIX, MS-Windows, C, C++, scripts. Experience encompasses all aspects of product life cycle from customer requirements through development, production, operations and support.

• Excellent communication skills (written and verbal). Interacted with a diverse group of customers, developers, testers, administrators, and project teams.

• Data Governance and Policy compliance IBM Information Server deployment including applications.

• AEGIS Defense System development encompassing US Navy and Foreign Military Systems.

• Installed, upgraded, and maintained multiple Linux/iOS/AIX/Windows systems and subsystems.

• Provided day to day performance monitoring and error detection; performed system tuning as necessary.

• Maintained appropriate security facilities and performed ongoing monitoring of access activity.

• Performed system bench marking for server sizing and developed/documented new configurations.

• Remedy Hotline support, on-call application and OS monitoring and problem resolution.

• Provided remote, multi-data center, development and test lab monitoring and support.

• Developed, tested and implemented automation routines and scripts where necessary.

• Performed research and development on new and emerging technologies.

• Experience supporting commercial and proprietary Applications.

• DoD Secret Clearance 2014.
Authorized to work in the US for any employer

WORK EXPERIENCE

Sr. Software Systems Engineer
The Vanguard Group   -   Malvern, PA - October 2013 to Present

Judge Group Inc., Consultant)

As a member of the Information Technology Security Office (ITSO) I am responsible for the automated data governance COTS products proof of concept evaluation and deployment. The products evaluated were Collibra, Adaptive, Informatica, Talend, Oracle, IBM Information Server including the full application suite. From within a close team environment my specific tasks include; gathering requirements from the business units,

selecting vendors, issuing requests for formal information, designing/implementing evaluation systems for demo products, and, preparing recommendations. Deployed IBM Information Server including the applications suite for development, client acceptance testing and production. The effort also included integrating CompactBI Metadex.

Sr. Software Systems Engineer

Philips Respironics - Langhorne, PA - January 2013 to October 2013

Responsible for the software and system design of intelligent fixed CPAP, auto-CPAP home healthcare devices. This effort encompasses all aspects of real-time embedded software development including drafting the functional requirement, final client testing and FDA verification. The proprietary system's M2M technology includes; STMicrocontrollers (STM32F10x ARM Cortex-M3), Flash Memory Drivers (I2C, Serial, SPI) and intelligent CDMA Cellular Network Modem drivers. All device application and driver code is written in C/C++ and runs on the PowerPak-Segger RTOS.

Sr. Systems Engineer, Consultant

Adidas Wearable Sports Electronics - Chadds Ford, PA - August 2012 to November 2012

Responsible for Linux, iOS (iPad) test integration and administration. Conducted field integration, lab and operations performance analysis. Recommended and implemented Engineering solutions. Analyzed test data utilizing PostgreSQL procedures and MS-Office.

Consultant

Aerotek Inc - October 2008 to January 2012

October 2008 - January 2012

Supported multiple local and remote high performance real-time Red-Hawk Linux based Aegis development test centers. Installed/patched Linux and applications as required. Supported user and group accounts including SAN file systems. Designed and developed high performance C++ SMP Linux application analysis tools. Identified, analyzed, and resolved on-site technical issues pertaining to Linux/MS-Windows operating systems, TCP/IP(UDP) networks and middleware communication layer components. Participated as an integral part of the Aegis design team, coordinated engineers and support staff in BMD projects efforts. Performed research and highly complex system testing related to performance enhancements. Recommended corrections to intricate technical applications and conducted analyses to enhance application performance. Provided leadership, professional guidance and technical training to less experienced personnel. Provided technical consultation to other organizations; interacted with senior customer personnel and internal senior management. Conducted cost analysis and evaluation of vendor capabilities to provide required products or services. Recommended vendor(s) and presented to senior management and/or customer where appropriate. Identified, recommended and pursued technology and/or practices to apply to solutions.

Sr. Software Engineer, (Aerotek Inc., Consultant)
November 2007- October 2008

Responsible for vendor discovery, component selection, qualification and environmental screening of solid state NFS network storage for SMP Intel and DSP based Linux systems for Aegis BMD. Assessed MTBF and mechanical interface compliance. Utilizing scripts/C/C++ designed and implemented embedded test code to evaluate vendor components. Analyzed and determined root causes of failures. Documented deficiencies and followed up with vendors and Lockheed Engineering groups.

Sr. Principal Engineer Lead, (CSC

Lockheed Martin - Moorestown, NJ - April 2006 to January 2012

Moorestown, NJ

Sr. Principal Engineer Lead, (CSC/MSE Inc., Consultant)

Consultant
CSC Inc - April 2006 to November 2007

Developed Aegis BMD weapon system endurance tests utilizing C/C++/Scripts for performance and throughput studies of large SMP Linux systems. These tests specifically targeted resource utilization of IBM Blade Centers running Element applications on Concurrent (Red Hawk) Real-Time Linux including throughput measurements of the NDDS middleware.

Sr. Systems Engineer
AmpWorx Inc   -   Trevose, PA - August 2003 to April 2006

Selected and implemented Linux components as replacements for Microsoft operating systems and products enterprise wide. The Linux components included Red Hat Linux and a combination of Open Source applications on the KDE desktop. Duties included, creating Statement of Work, deployment specification, backup/disaster recovery, operations support of roll out, network setup, user accounts, NFS/SAMBA file systems/printers, operating system and office kit installation/tuning, automation scripts.
Computer Sciences Corp., Moorestown, NJ
Sr. Software Engineer, (Aerotek Inc., Consultant)
June 2000-August 2003

Participated in a project for the Navy, developing SGML high-volume secure publishing systems utilizing CSC's proprietary JCALS security-hardened Client/Server SQL (Stored Procedures, Triggers), C/UNIX/Scripting, MS-Visual C++ MFC infrastructure, Oracle and the XYVision publishing engine. Within the framework of SEI process definitions, interpreted the Statement of Work, extracted the functional requirements, gained joint approval of functional and development specifications and managed all aspects of the client roll out.

Sr. Systems Engineer
Boeing Defense and Space   -   Ridley Park, PA - October 1996 to June 2000

Was responsible for the administration and security of Catia CAD/CAM and Engineering Analyses AIX Workstations located in Ridley Park, PA and Pax River, MD. Support included installation of Boeing Proprietary Apps, COTS Packages, Oracle instances, AIX, writing korn/Perl automation scripts, NFS mounted file systems and IBM Enterprise AIX workstation configuration management tools. Other duties included AIX Upgrade Rollouts, Remedy Hotline support, and daily problem resolution, all requiring a high level of customer communication.

Sr. Systems Engineer
Sun Oil Refining & Marketing   -   Philadelphia, PA - January 1992 to October 1996

Designed and supported LAN/WAN systems that included; MS-Windows, NT, MS-DOS and OS/2 clients with UNIX, OS/2, Pathworks and NT servers. The required support included LAN/WAN file storage systems, asset monitoring, backup/recovery, user account creation, maintenance and security. Designed and implemented an MS-Visual C/C++ MFC Desktop Application Delivery and Refinery Resource Management System. Required daily duties included; problem solving, system monitoring, performance tuning, help desk, customer support and training.

Sr. Software/Hardware Engineer
E3 Inc - Ivyland, PA - July 1989 to January 1992

Hands-on responsibility for the entire HW/SW development cycle of Automated Semi-Conductor Assembly Inspection and Die Attach Systems. The product lines applied C UNIX based Vision Systems and a custom designed array processor for semiconductor wire geometry inspection. Algorithms were written in C/Assembler/scripts on embedded M68xxx and I8088 custom robotic RTOS control systems networked with the Imaging system for parallel real-time control of the robotic workholders, and, developed and debugged utilizing in-circuit emulators. The projects included RS-232 communications (SECS), GUI operator interfaces and disk controllers.

Programmer Analyst

ADP Inc - Mount Laurel, NJ - June 1987 to July 1989

Designed and Implemented a Software Subsystem for Brokerage Information Terminal Systems. This product involved C MS-DOS and IBM PS/2's networked with a proprietary Terminal Interface Controller which was designed to interface GTE, ADP and IBM dumb terminals to an SNA based WAN/LAN. This real-time embedded project utilized I80186 host processors and was developed and debugged using in-circuit emulation.

EDUCATION

BS in Applied Technology, Computer Science

Thomas Edison State University - Trenton, NJ
1997

ASEET in Electrical Engineering Technology

Lincoln Technical Institute
1987

ADDITIONAL INFORMATION

TECHNICAL SKILLS

Operating Systems/Networking
Linux, PowerPak-Segger RTOS, iOS, Wireless Networks, printers, Network Storage, UNIX AIX, RedHawk Concurrent Real-Time Linux, MS-Windows NT (Client/Server), MS-DOS, OS/2, Networking (VLAN, SNMP), TCP/IP, SNA Token Ring, Decnet

Languages/Tools
IBM Information Server, Metadex, UNIX/Linux Shell Scripts, C, C++, MS-Powershell, IAR Embedded Workbench, ST-Link JTAG, MS-Visual C/C++ MFC (Client/Server), SQL, Perl, Assembler, Unix performance tools, collectd, oprofile, jstat, SVN, Clear Case, PVCS, SEI CMMI Level 5.

Hardware
STM32F10x ARM Cortex-M3, I2C, Serial, SPI, Flash, M2M CDMA Cellular Modems, IBM Blade Center, SAN Storage (Raid), Apple iPads, IBM RS6000, DEC, VME, Motorola, Zilog