Kevin R. Bulgrien

System Engineer

🏠 Longview, Texas
✉ kbulgrien@gmail.com
🔍 kevin.bulgrien.net

OBJECTIVE

Responsibly combine experience with learning to strategically craft technical solutions, processes, and documentation that delights and empowers peers or end users in their own quest to effectively serve others. Create or utilize existing software, hardware, tools, or other applicable resources best suited to meet demanding requirements while maintaining a strong commitment to exceptional integrity, quality, service, and continuous improvement.

SKILLS

Strengths Finder 2.0
- Learner
- Intellection
- Responsibility
- Belief
- Strategic

Hardware
- Design & Integration
- Manufacturing Support
- Logic & Bus Analysis
- Embedded Technologies
- PCB & Schematic Capture
- Troubleshooting & Repair
- Digital Electronics
- Computer-On-Module
- Test Equipment

Development
- C & C++
- Shells & Scripting
- Interrupt Handlers
- GNU Make & Autotools
- FORTH & Pascal
- Web & Markup
- Communications
- Technical Writing
- Assembly
- SQL & Database
- GTK & libglade
- Doxygen

Software
- Office Tools, Utilities
- Difference Analysis
- CVS, SVN, Bazaar...
- Graphics & Diagramming
- Debuggers & Analyzers
- GNUCash, QuickBooks
- Schematic Capture & PCB
- Development Environments
- Installers

Environments
- Linux & Unix
- HPUX, Solaris
- Windows & DOS
- HP-Basic
- Embedded
- Novell & Other

Servers
- Various Linux & Unix
- Firewall, Security Tools
- Apache, PostgreSQL
- Web Applications
- DHCP, DNS, NTP, SSH
- Virtualization Technologies

Infrastructure
- Networking, Telephony
- Hubs, Switches, Routers
- SM/MM fiber optics
- Multiplexers, Port Servers
- T1, ISDN, RS-232, RS-422
- Printers, Terminals

EXPERIENCE

Apr 2015 - Present

Freedom Communication Technologies, Inc., Kilgore, Texas
System Engineer

- Design, implement, and maintain Windows Embedded operating systems.
- Specify embedded system platforms, components, and operating systems.
- Design, implement, and maintain manufacturing equipment.
- Mature and continuously improve documentation, process, and automation to drive quality and efficiency into product deployment.
- Deploy, maintain, and utilize information tools to capture and preserve business data.
- Deploy and administer Linux servers that host version control, web and database applications, shell environment, customer/contractor portals, etc.
- Deploy and maintain Windows Embedded Standard tools and SQL Server instances.
- Facilitate replacement of assets with legacy operating systems as part of a judicious migration to more sustainable systems.
- Configure, deploy, and leverage virtualization tools such as VMware ESXI and VMware vCenter to facilitate engineering development, release, etc.
- Specify, deploy, and guide maintenance of company computing and network infrastructure, including Windows Server 2012, related domain, and Active Directory.

Oct 2000 – Apr 2015   General Dynamics Missions Systems, Longview, Texas
formerly TriPoint Global Communications, VertexRSI, General Dynamics SATCOM Technologies
Senior Electrical Engineer

- Design, implement, and maintain Windows Embedded and Linux operating systems.
- Specify embedded system platforms, components, and operating systems.
- Design, implement, and maintain manufacturing equipment.
- Design, develop, and maintain C/C++ applications to deploy on or interact with embedded systems.
- Troubleshoot, diagnose, and mitigate severe embedded product technical issues including CFLASH/SSD corruption, system instability, etc.
- Mature and continuously improve product development via documentation and scripted process automation to drive quality and efficiency into product development.
- Design and implement monitor & control interfaces via data-driven model to generate documentation and code for embedded systems and associated client applications.
- Package software with tools like Flexera InstallShield.
- Diagnose and repair embedded system software and tools – often without prior application experience. For example, troubleshoot and maintain embedded systems implemented in FORTH, diagnose and repair malfunctioning CPLD code, debug NI LabVIEW software, and patch a malfunctioning assembler.
- Use tools such as assembly language, gcc, and Dynamic C, etc. to implement embedded product subsystems.
- Deploy, maintain, and utilize information tools such as Wiki, forums, and newsgroups to capture and preserve business critical data.
- Deploy and administer Linux servers that host version control, web and database applications, shell environment, etc.
- Configure and maintain SQL Server instances to support Windows XP Embedded Development Suite.
- Maintain HP BASIC, FreeDOS, and various legacy operating systems on manufacturing equipment.
- Maintain and support HPUX and Solaris servers that host legacy product intellectual property and development tools.
- Utilize schematic capture and board layout tools to implement/modify board designs. Implement resolver and optical encoder interfaces in embedded systems.
- Specify and utilize design comparison tools to assure accurate implementation of schematic and printed circuit board engineering change orders.
- Design and implement embedded software on a Delta Tau Turbo PMAC2 for data acquisition in multiple 4-meter optical telescopes.
- Configure, deploy, and leverage virtualization tools such as VMware ESXI, Oracle VM VirtualBox, and Microsoft Virtual PC, to facilitate engineering development.

Jun 1999 - Oct 2000   Ronald Hill dba CompSupport, Longview, Texas
Network Engineer

- Support SCO and NCR UNIX systems, terminals, devices, and personal computers.
- Multi-user computer system serial and network communication systems support.
- Network cable plant installation, certification, and as-built documentation.
- Consultation, design, implementation, and maintenance of enterprise-wide LAN/WANs deployed over POTS, Ethernet, ISDN, T1 and SM/MM fiber optic services.
- Site surveys, project estimating, proposal drafting, project management, and deployment of cabling and telephone services as an authorized contractor for a Competitive Local Exchange Carrier (CLEC) in two metropolitan areas.
- Y2K problem diagnosis and intermediate solution provided for cable TV switching router at AT&T/TCI Cablevision in Dallas, Texas.

Apr 1992 - Jun 1999 **EDP Enterprises, Inc., Longview, Texas**
Senior Systems Engineer

- Extensively deployed and supported NCR System 3000 UNIX and Microsoft NT 4.0 servers and their serial data and Ethernet LAN/WAN communication networks.
- Responsibilities included in-depth telephone support, diagnosis, and on-site analysis/repair of operating systems, application software, third-party software, computer systems, and serial/Ethernet/POTS/FDDI/T1/ISDN/56K/Frame Relay communication equipment.
- Designed, developed, and maintained comprehensive software diagnostic tools to facilitate problem diagnosis and resolution.
- Technical programming in C, COBOL, Seay Systems I-Shell, Awk, and Bourne Shell scripting for interfacing client software, third-party applications, and hardware, including printers, terminal servers, print servers, and port servers.
- Extensive technical writing to document support and installation procedures.
- Technical consultant to internal development personnel and customer support staff.
- Performed component level and card level repair of NCR data entry terminals.
- One year of departmental supervisory experience.

Nov 1998 - Dec 1998 **Encore Multimedia**, Longview, Texas
Technical Consultant

Supported production of an interactive, multimedia CD-ROM.

Jul 1986 - Aug 1991 **LeTourneau University, Longview, Texas**
formerly LeTourneau College
Information Technology

- Responsible for enterprise-wide software and hardware support of Windows 3.x, DOS, CP/M personal computer systems, peripherals, and users. Occasionally supported DEC MicroVax II and IBM System 36 servers and users.
- Duties included need/problem analysis, product assessment, procurement, installation, end-user training, and support.
- Repaired computer equipment at card and component levels.
- Developed software for campus personnel.
- Authored procedure manuals for tasks and repairs performed by the computer information technology office.
- Analyzed office operation and developed custom software to facilitate office organization and information management.

Jun 1991 **Riverway Company**
Contract Programmer

- Develop software to monitor, process, and display barge tug engine, fuel, and Global Positioning System real-time data collected via multiple RS-232 serial ports.

Nov 1987 - Mar 1989 **LeTourneau University Research & Advanced Development Institute**
Longview, Texas
Contract Programmer

- Design and implement an escrow accounting program using dBase III and Clipper.
- Provide documentation, training, and support.

EDUCATION

1982 - 1986 **LeTourneau University, Longview, Texas**
B.S., Computer Science & Electrical Technology

1982 - 1982 **Saint Clair County Community College, Port Huron, Michigan**

1978 - 1982 **Sandusky High School, Sandusky Michigan**