David R Grant

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Goal

To provide excellent solutions to difficult problems. To give an unexpected level of customer service, both internal and external. To foster greater understanding through mentoring, cooperative learning and targeted training.

Skills

Project design, development, and management from start to finish. Telex RoIP Dispatch System Design, Implementation, Documentation and Training. Complete Software System design and implementation for Windows and UNIX/Linux platforms. Complete RF/Microwave System design and implementation. Complete WAN/LAN system design and implementation. Provide existing System re-engineering and documentation. Published Author and Instructor for custom online and onsite technical training covering Telex RoIP and Basic 2-Way Land Mobile Radio Systems.

Experience

8/1987-Present Phase 4 Design, Inc., Kenmore, WA
Owner/President/Principle Engineer/Trainer
Responsibilities: Turn-key Telex RoIP Dispatch System Design, Implementation, Maintenance, Online/Onsite problem resolution and training. Author and present Online/Onsite training classes for Telex RoIP Integration and Basic 2-Way Radio Systems for Technicians. Design and Implement SIP based solutions for Telex RoIP Dispatch Systems. UNIX/NT/Linux/Windows based telecommunications hardware/software system design and implementation. Custom RF and Microwave System design and implementation. IT infrastructure design and implementation, T1, Cisco Router configuration, Windows Domain migration and AD setup. Sales and budget management. Project development and management. Technical Training. See www.phase4.org.

TELEX RADIO DISPATCH PRODUCTS Factory Certified Trainer. (2008-Present)
TELEX RADIO DISPATCH PRODUCTS Factory Certified Technician. (2007-Present)
GROL with Radar Endorsement (Current)
Amateur License – Advanced class K7DRG (Current)

Accomplishments:

- Update the Washington State Department of Fish and Wildlife Enforcement SIP inbound phone call processing script including new audio vocabulary items
- Upgrade the Statewide Washington Department of Fish and Wildlife Enforcement Telex RoIP System to enable Officer/Man Down functionality as well as unit ANI

- Developed a mobile platform known as RTACC that provides a fast deployment, rugged environment package which allows for LTE based encrypted video streaming to remote locations
- Developed an ESChat LTE to LMR Gateway product know as ETAC
- Develop a process for the remote integration of SIP Telephony into a new or existing Telex RoIP Dispatch System
- Design and Implement a 40 station/16 line Asterisk based SIP Telephony solution providing integrated headset operation at the Washington State Department of Fish and Wildlife Telex RoIP Dispatch Center known as WILDCOMM
- Design and build custom RoIP remote base station sized for a bookshelf to provide fill-in radio coverage known as an ORB or Orphan Remote Base
- Design and Implement 50 channel Telex RoIP Dispatch System for Washington Department of Fish and Wildlife providing statewide radio coverage for Enforcement Dispatch in Olympia
-Authored 4 Day Online Training class "Basic 2-Way Radio for Technicians"
-Design, Build and Install turn-key multi-channel, multi-site Raven Voter and Telex RoIP solution for Seattle Dept of Transportation
-Created Online Remote maintenance and Support program for Telex RoIP users
- Authored 2 Day Online Training class "Telex RoIP Dispatch System Integration Boot Camp"
-Authored SIP Whitepaper for Telex RoIP Dispatch Systems
-Achieved status as Telex RoIP Dispatch Technician and Factory Trainer□
-Planned and implemented a multi-city Windows 2000 to Windows 2003 domain migration.
-Designed and implemented an Access application for reporting on, and managing Stock Options known as OptionCalc.
-Designed and implemented an installable Linux tar package that would configure two Linux servers as a High Availability Cluster. The package used SNMP Traps to signal events that would cause a fail-over.
-Designed and implemented several .NET 1.1, C# components using Visual Studio 2003. Functionality required the creation of a custom Windows Sharepoint Services Web Service, as well as the ability to adjust User NTFS File/Folder Security on a global scale. All of the C# components required complete test frame applications as a runtime environment.
-Planed and implemented a multi-city data integration project. This project required a T1 link for data and voice between Seattle, Portland and Medford, a dedicated T1 Internet connection, Windows NT to Windows 2000 domain migration. Network data required the use of Adtran channel banks and Cisco routers. Implemented backup Domain, DNS and WINS servers across Portland and Seattle.
-Designed and implemented a new Lab expansion for a local testing company. This project involved wiring the new lab for data and phone, IP subnet design and configuration to support 50 workstations. Installation and configuration of Windows 2000 Server and Windows Server 2003 domain controllers, Linux RedHat 9 router/VLAN, Gigabit Network transport, inter-office VPN tunnels and 802.11g Wireless Network.
-Provided Windows NT to Windows 2000 domain migration, Goldmine upgrade to v6.5, Office/Outlook 2000 upgrade and integration for a local technical sales company.
-Provide maintenance, new development and ongoing support for an Access 97 based database application.
- Formed Phase 4 Design, a new custom RF/Software design company in 1987. Incorporated in 1990.
- Formed a new Internet hosting company in 1999 called Host Northwest, see www.hostnw.net.

- Designed and implemented all of the C software required to operate a UNIX based Pager Billing System / Paging Switch interface for Cincinnati Bell Information Systems.
- Designed and implemented a C++/STL based, mobile number consolidation and reconciliation system for AT&T Wireless. This system is used every week to process all active mobile subscriber numbers for reloading into all of AT&T's Lucent cellular switches. This system operates in the Sun Solaris environment.
- Proficient in many different variants of UNIX including SCO, AIX, HPUX, ULTRIX, Dynix/PTX, Linux, and SUNOS. Topics include kernel tuning, file system maintenance, shell programming, inter-process communication, shared memory and remote system process control.
- Proficient in Z-80 and 6502 assembly language programming.
- Designed and implemented numerous custom data conversions for the paging industry using KORN SHELL, AWK, SED, and other UNIX tools.
- Designed and implemented all code and Database structures to create the member interactive Web site talktogov.com.

11/2005-2/2010 Manon Engineering, Inc., Kirkland, WA
Technical Sales / Product Support
Responsibilities: Sales, marketing, and technical support for varied products in the Public Safety, Land Mobile Radio, Fixed Wireless and Cellular industries. Our sales territory includes Alaska, Idaho, Hawaii, Montana, Oregon and Washington.

Accomplishments:

- Achieved Telex Certified Technical Trainer status (2008)
- Achieved Telex Certified VoIP Technician status v 4.1 (2008)
- Achieved Telex Certified VoIP Technician status v 4.0 (2007)
- Attended training for Anite Nemo Cellular Test Systems
- Attended training for Datron P25, Land Mobile, and HF radio systems
- Conducted numerous customer product demonstrations and seminars

12/2000-3/2003 VMC Consulting , Redmond, WA
Senior Software Development Manager 2
Project Manager
Responsibilities: Joined the senior management team of this startup Outsource consulting company with the goal of reaching $30M in annual revenues, provide direct C language / UNIX and Win32 system programming services, and help the company grow its software development and technical writing business units.

2/2000-12/2000 DMR Consulting, Bellevue, WA
C++ team lead, Technical Architect
Responsibilities: Joined the ARROW project development team as the Technical Architect, C++ team lead and primary developer.

6/1999-2/2000 Cambridge Technology Partners, Bellevue, WA
Software Consultant
Responsibilities: Project based C++/VB/ASP software system design and implementation.

2/1999-6/1999 BEST Consulting, Bellevue, WA
Software Consultant
Responsibilities: Project based hardware and C/C++ software system design and implementation.

4/1998-1/1999 ConnectSoft Communications Corp/Vogo Networks, Inc.,
Bellevue, WA
Senior Software Engineer
Responsibilities: Project based telecommunications hardware/software system design and implementation. Nuance Voice Technologies development.

5/1995-4/1998 Mosaix, Inc., Redmond, WA
Senior Software Engineer- Grade 5
Responsibilities: IBM AIX kernel system programmer. VC++/COM Component Programmer and trainer. UNIX/NT based telecommunications hardware/software system design and implementation.

2/1991-5/1995 SureFind Corporation, Seattle, WA
Senior Systems Analyst/Telecommunications Consultant
Responsibilities: All telecommunications systems and software development in support of multiple IVR systems and Summa 4 digital CO switch. UNIX/NT based Telecommunications hardware and C/C++ software system design and Implementation.

12/1987-2/1991 US West Paging, Inc., Bellevue, WA
Director, Technical Services - Corporate office
Manager, Systems Development - Corporate office
Manager, Technical Services – NW Regional office
Responsibilities: Operation, growth, and reliability for all technical assets in the 14 state US West Paging franchise area. New acquisition integration, technical due Diligence, budgeting, long term and strategic planning, project development and management, cost benefit analysis, and field supervision of asset Development.

Accomplishments:

– Helped US West Paging to become the 9th largest Radio Common Carrier in the US in 1990.
– Designed and implemented a wide area integrated voice mail system across 16 major markets.
– Directed and developed paging system infrastructure to support more than 75,000 pagers.
– Directed the wire-line paging asset transfer and system integration.
– Defined the system know as "Page Assist" that helped US West Cellular achieve a 30% increase in air-time utilization.

1981-1987 <u>Feeks Business Communications</u>, Bellevue, WA
  <u>Chief Systems Engineer</u>
  <u>Responsibilities:</u> Operation, growth, and reliability for all technical assets in the NorthWest United States. Head of Research and Development for new products and services strategic planning, project development and management, cost benefit analysis, and field supervision of asset development.

  ## <u>Accomplishments:</u>

  − Designed and implemented a 40+ transmitter, radio link control, multi-switch, simulcast paging system with 20,000 square-mile coverage area and 25,000 users.
  − Contributed to the Engineering Section of a 5 site AMPS Cellular Application.
  − Upgraded paging system to support Interactive Voice Response features.
  − Integrated paging, IVR, and Telephone Answering System as a unified service offering.
  − Expanded infrastructure capacity to accommodate pager growth from 2,500 to 25,000 units.
  − Directed the maintenance program that resulted in 99.999% system uptime.
  − Directed the development of the Automated Message Transmission System for resending Alphanumeric paging messages remotely.
  − Achieved system level proficiency with C language programming, RF and Telephony systems engineering.
  − Achieved system level proficiency with RF and Telephony test equipment, both analog and digital, including Spectrum Analyzer, IFR/Cushman, TIMS and TBERD.

1978-1981 <u>Ratelco</u>, Seattle, WA
  <u>Position:</u> Manager, Mobile Telephone Repair, Pager and Portable Repair, Journeyman 2-way Technician.

  ## <u>Accomplishments:</u>

  -Achieved Journeyman status in 2 way mobile and portable radio products.
  -Attended Microprocessor training for the Pulsar II Mobile Phone products.
  -Achieved proficiency in the Motorola line of 2 way mobile, portable and pager products.

1975 – 1978 Radio Systems, Inc. Seattle, WA.
  <u>Position :</u> Telecommunications Technician

  ## <u>Accomplishments:</u>

  -Achieved proficiency in the RCA line of 2 way mobile and portable products.

1972 – 1975 Cascade Loggers Supply, Chehalis, WA.
  <u>Position :</u> Telecommunications Technician

  ## <u>Accomplishments:</u>

  -Received FCC Commercial License with Radar Endorsement.
  -Designed and installed first Solar Powered Repeater in Lewis County.
  -Achieved proficiency in the GE line of 2 way mobile and portable products.