David R Grant

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<u>Goal</u>

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 and cooperative learning.

<u>Skills</u>

Project design, development, and management from start to finish. Complete Software System design and implementation for Windows and UNIX platforms. Complete RF/Microwave System design and implementation. Complete WAN/LAN system design and implementation. Existing System re-engineering and documentation.

Experience

8/2003-Present Phase 4 Design, Inc., Kenmore, WA

Owner/President/Principle Engineer

Responsibilities: UNIX/ NT based telecommunications hardware/software system design and implementation. RF and Microwave System design and implementation. IT infrastructure design and implementation, T1, Cisco Router configuration, Windows Domain migration and setup. Sales and budget management. Project development and management. Technical Training. See www.phase4.org.

TELEX RADIO DISPATCH PRODUCTS Certified 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.
- 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.

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 (2009)
- Achieved Telex Certified VolP 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 helping to reach \$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.

- Reached the \$30M revenue mark in less then 24 months.
- Participated in C++, C#, and SQL design and development.
- Participated in the scoping, planning, or management of over 60 projects in software development, software test, network management, PC and Xbox game development, and system/user documentation.
- Managed more than 10 projects simultaneously.
- Assembled and led the team of 4 network engineers responsible for all server resources, data transport, and system backup for Microsoft Game Studios across Washington, Utah, and Texas.
- Assembled and led the team of 4 technical writers responsible for creating the Vision, High Level, and Detail Document plans for a 2000+ page User guide for a new C# based software product being created by a software company based in Denver.
- Attended the VSLive 2001 and ASP.NET/WinDev 2002 seminars with a focus on C# language and C# remoting technologies.
- Designed and implemented the C# parser that is currently used to process the 30-40MB of daily new call data required by the MS USHQ Sales web site know as

"REPSTATS".

- Designed and implemented a Web based collaboration site, using Project Central, to support all company technical writing projects.
- Designed and implemented a Web based upload/download system required for non-FTP secure file transfers using Active Server Page technologies.
- Designed and implemented an XML/XSL based test harness for a COM/JAVA SDK.
- Assisted the design and implementation of a .NET based sales call analysis Web site using C#.NET, ASP.NET and SQL2000 OLAP database technologies.

2/2000-12/2000 DMR Consulting, Bellevue, WA

C++ team lead, Technical Architect

Responsibilities: Joined the ARROW project development team as the Technical Architect and C++ team lead and primary developer.

Accomplishments:

• Assembled and led the C++/Middleware team that created a lossless, high performance packet transport mechanism. Personally designed and implemented the wire-level transport subsystem. The middleware component was designed to provide a fast and durable transport for a wireless workflow system using a combination of technologies including SQL Server 2000, OLE -DB, COM, Windows 2000 Advanced Server, and Windows CE running on a Fujitsu Pencentra 200. The wireless transport used CDPD technology.

6/1999-2/2000 Cambridge Technology Partners, Bellevue, WA

Software Consultant

Responsibilities: Project based C++/VB/ASP software system design and implementation.

Accomplishments:

- Designed and implemented a Visual Basic 6 based Store Item aging and prioritization system for Associated Grocers.
- Designed and implemented an ASP based digital dashboard for Cambridge Technology Partners.

2/1999-6/1999 BEST Consulting, Bellevue, WA

Software Consultant

Responsibilities: Project based hardware and C/C++ software system design and implementation.

- Designed and implemented a Linux based, multi-threaded, command and control system in gcc.
- Recreated missing critical system documentation for King County Metro Transit Vehicle Locator system.
- Acted as liaison between Metro IT department and Metro Radio Maintenance to identify and resolve several long term problems in the Metro Vehicle Locator system.

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.

Accomplishments:

- Provided in-house training for Microsoft COM technologies.
- Achieved system level proficiency in Delphi 3/Object Pascal programming.
- Achieved system level proficiency in Nuance Natural Language Speech Recognition System, Dialogic Antares telephony platform, and the Centigram Tru-Voice Text To Speech platform.
- Designed and created an interactive, speech recognition based, voice mail retrieval prototype using all of the above technologies.

5/1995-4/1998 Mosaix, Inc., Redmond, WA

Senior Software Engineer- Grade 5

Responsibilities: IBM AIX kernel system programmer. VC++/COM Component programmer. UNIX/NT based telecommunications hardware/software system design and implementation.

Accomplishments:

- With the aid of one other programmer I designed and implemented a complete port of the Mosaix 5000 Call Management System from HP-UX 8.x to IBM AIX 3.x.
- Developed the detail design specification for a CSTA Mosaix / Lucent switch interface component.
- Participated in the High Level and Detail designs for the next generation Mosaix Call Management system.
- Designed and created a COM client / UNIX server based Mosaix Command Execution System.
- Achieved system level proficiency in IBM AIX kernel system internals for the PowerPC platform through training.
- Achieve d system level proficiency in the Microsoft Component Object Model and VC++ through training.
- Provided in-house training for Microsoft COM technologies.

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.

- Designed and implemented all of the C software required for Telephony Services in the UNIX based Surefind Classifieds shop by phone system.
- Designed and implemented a KORN SHELL based, vocabulary file storage and remote distribution system controlling 80,000 vocab items.
- Achieved system level proficiency in the Summa 4 ASSIST switch interface software.
- Achieved system level proficiency with Periphonics voice server systems.

1987-2/1991 Phase 4 Design, Inc., Kenmore, WA

Owner/President/Principal Engineer

Responsibilities: RF and Microwave System design and implementation. UNIX/NT based telecommunications hardware/software system design and implementation. IT infrastructure design and implementation, T1, Cisco Router configuration, Windows Domain migration and setup. Sales and budget management. Project development and management.

Accomplishments:

- Formed 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, interprocess communication, and remote system 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.

12/1987-2/1991 US West Paging, Inc., Bellevue, WA

<u>Director, Technical Services - Corporate office</u>

<u>Manager, Systems Development - Corporate office</u>

<u>Manager, Technical Services - NW Regional office</u>

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.

- 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 Feeks Business Communications, Bellevue, WA

Chief Systems Engineer

Responsibilities: 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.

Accomplishments:

- Designed and implemented a 40+ transmitter, radio link control, multi-switch, simulcast paging system with 20,000 square-mile coverage area.
- 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 Ratelco, Seattle, WA

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

Accomplishments:

- 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.

Position: Telecommunications Technician

Accomplishments:

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

1972 - 1975 Cascade Loggers Supply, Chehalis, WA.

Position: Telecommunications Technician

- 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.