Kenneth Jennings

481 Sumter Avenue
Davie, FL 33325
(954) 612-1528/236-3289
www.kenjennings.com

OBJECTIVE

A senior-level software engineering position with a progressive and dynamic company that appreciates dedication to quality software solutions and technical achievement.

SUMMARY OF QUALIFICATIONS

Innovative software professional with a broad range of skills developed during 16 years of design and programming experience in a variety of industries and environments:

Military/Government	Embedded Systems and Data Collection
Manufacturing and Industrial Controls	Warehouse Tracking and Shipping
Time and Attendance	Credit and Financial Systems
Video and Computer Graphics	

Operating Systems/Environments
Solaris/Sun OS, Linux, Windows 95/98/ME/2000, DOS, SCO Unix, HP/UX, Ultrix, VMS, Unix System V, Opus Unix, TSO/ISPF

Databases
Oracle 8i, PRO/C, PL/SQL, Informix, esql/C, MySQL, ODBC, Informix 4GL, Model 204

Languages
C/C++, Perl, Unix shell scripting, Rexx/ARexx, Postscript, Pascal, COBOL, Fortran, Assembly, TAL, Quickstep

User Interfaces
X Window System, curses, OpenLook, Motif, MFC, KDE, DOS keyboard/screen I/O, GKS

Development Tools
PVCS/Dimensions 7.1, RCS, SCCS, Visual Sourcesafe, vi, Makefiles, KDevelop, Microsoft Visual Studio, Protogen, Crystal Reports, Delphi, Test Director, Borland C IDE

Office Tools
Office 95/97/2000, Visio, Outlook, OpenOffice.org, Lotus Notes R5, Electronic Timecard

Communications/IPC
TCP/IP, UDP, sockets, shared memory, semaphores, pipes, Allen Bradley Data Highway, Starnode, serial

Hardware
Sparcstations, Sun servers, desktop and embedded PCs, microVAX II, IBM mainframes, DECstations, AT&T 3B2, Eaton 2000 IWS.
Telxon RF data collection terminals, Computer Identics scanners, Allen Bradley PLCs, Postscript printers, Zebra Stripe/Sato/Fargo bar code printers, imaje printers, microAnnex interfaces

OVERVIEW OF EXPERIENCE

Designed, created, and tested enhancements to a high-performance OLTP client/server system processing domestic and international financial transactions. Designed, created, tested and implemented solutions to convert third-party account data into the format native to the financial transaction database.

Designed, created, tested and maintained robust suites of client/server communication processes and software interfaces to hardware devices that manage manufacturing of medical devices by enforcing lot and safety controls in a industrial environment.

Created and tested software for embedded environments to provide user interfaces and communications with external hardware in hand-held PC and data collection terminals.

Specifically chosen as the developer for in-house and customer solutions to problems of interfacing to hardware and situations that require efficient and reliable code.

My commitment to thorough planning and testing resulted in software suites that run for months in an industrial environment without errors and anticipate potential problems caused by end users.

My ability to maintain a grasp on the technical requirements to solve problems while communicating effectively verbally and in writing with non-technical end users produces finished products that behave reliably, predictably, and intuitively for users.

EMPLOYMENT

12/00-Present   Contract Software Developer/Analyst,
First Data Merchant Services/Payment Solutions, Coral Springs, FL
SunOS/Solaris 8, Oracle 8i, PL/SQL, PRO/C, C++, PVCS Dimensions 7.1, RCS, TCP/IP, Perl
Windows 98/2000, Office 2000, Visio, Lotus Notes R5, Visual C/C++
IBM Mainframe TSO, ISPF

Currently participating in teams designing, coding, testing, and implementing new features and corrective maintenance updates in the high-performance OLTP financial application managing ValueLink gift card accounts. The OLTP system runs on Solaris and is implemented as multiple instances of several programs written in Oracle PRO/C that use sockets, shared memory, semaphores, condition variables, etc. The communication architecture services transactions from over 180,000 merchant locations. The database services tens of millions of gift card accounts belonging to over a hundred high profile merchants.

Designed, coded, and tested a new process enabling the OLTP system to collect daily foreign currency exchange rates from a server on the Internet and perform real-time currency conversion on transactions. This project is implemented using Oracle PRO/C executables, Unix shell scripts, crontabs, Perl scripts, and Oracle PL/SQL stored procedures.

Designed, coded, tested and implemented processes to port foreign account information into the OLTP database and allowing these foreign merchants' data to be processed as native accounts.

Current job duties also include performing technical support and analysis of high-visibility, time-critical issues on the production servers.

My knowledge of the underlying Unix IPC mechanisms in the OLTP system and commitment to error-free solutions frequently gives me the responsibility of creating tools for other developers to monitor and analyze the data being processed through the OLTP system. This includes: a tool to dissect the contents of OLTP transactions supplied in various text and binary formats, a library allowing external processes to monitor the real-time processing, heart-beat, and checkpoint events in the currently executing OLTP applications, and a tool to compare the contents of database objects stored in shared memory.

10/93-12/00   Applied Automation Techniques, Miami Lakes, FL

Senior Software Developer (6/99 – 12/00)

SunOS, HP/UX, Oracle PRO/C, asst. industrial peripherals
Embedded PCs running DOS, Borland C/C++
Windows 95/98, Microsoft Office, Visio, Visual Studio C/C++, Delphi, ODBC, SQL, Crystal Reports 8.0, Visual Sourcesafe, PVCS, Electronic Timecard, Test Director

Added features and fixed bugs in *AutoTime*, a large commercial time and attendance management software package.

Performed a variety of testing and maintenance on our client, server, reports, and some work on the GUI: Client data collection software operated on industrial DOS PC terminals, used a TCP/IP interface to the database server, and was built using Borland C/C++ 4.5 for DOS. The background database server ran on Sun, HP, or Windows platforms for Oracle and was written in C++. GUI configuration and management software ran on Windows using a Delphi 3 GUI, generated reports using Crystal Reports 8.0, and executed back-end communications with the server using code written in Microsoft Visual C++ 6.0.

Designed and wrote the original data collection terminal's user interface software for presenting menus and collecting data. Also added new features to the terminals for communication with external hardware such as bar code scanners and label printers (Zebra Stripe). Ported several Crystal reports to Oracle PRO/C to run on Unix as a special project for a specific client.

Senior Software Developer (2/98 – 6/99)
SunOS, HP/UX, Oracle PRO/C, asst. industrial hardware peripherals.
Embedded PCs running DOS, Borland C/C++, TCP/IP
Windows 95/98, Office, Visio, Visual Studio C/C++, ProtoGen, MFC, Crystal Reports 6.0, ODBC, SQL, Visual Sourcesafe, PVCS, Electronic Timecard, Test Director

Added features and fixed bugs in *AutoTrak/AutoShip*, a large commercial shipping and inventory management software package.

The program was written in Visual C++ 5.0 with a GUI primarily created in ProtoGen (and some MFC dialogs). The program used the Oracle or Informix databases and generated reports using Crystal Reports 6.0. Some of the back-end database processing was duplicated in Oracle PRO/C to run as Unix processes.

Added new features for communication with special industry hardware (scales, conveyor lane controls, scanners, and label printers). Wrote the user interface software for remote, RF hand-held data collection terminals (Telxon PTC960.) Added background processes written in Oracle PRO/C for Unix platforms to load and validate shipping information in the database.

Software Developer (1/94 – 2/98)
SCO UNIX, Informix, esql/C, Informix 4GL, SCCS, PVCS, curses
Embedded PCs, assorted industrial hardware controllers and peripherals: ci scanners, Sato, imaje, Fargo, and Zebra printers, Allen Bradley PLCs, Telxon RF terminals, microAnnex Ethernet-serial interfaces.
Allen Bradley Data Highway, TCP/IP, Starnode
C, TAL, QuickStep

Worked with a team of developers sharing duties to design, write, test and maintain robust suites of software used to manage manufacturing on Vistakon's First Generation Surevue and Accuvue contact lens production lines in Jacksonville, FL.

Designed, wrote, tested, fielded, and maintained a significant part of the data processing support of the Vistakon manufacturing environment: A single production line uses multiple servers running SCO Unix that store data in Informix databases. Some programs providing terminal displays (Wyse60 and Telxon PTC960 hand-held RF terminals) were written in Informix 4GL while others were written in Informix Embedded SQL/C (esql/C) and generate their displays using curses. Many programs were background communication processes written in esql/C to provide interfaces to a variety of industrial hardware devices, exchange information with other processes, and store information in the Informix database. Some code was in proprietary languages executed in embedded environments; for example, Computer Identics scanners and terminals contain code written in TAL.

Special assignments included maintenance on a program written by outside contractors in QuickStep for a Control Technology Corporation 2200 Automation Controller. Wrote C code to communicate with the following devices: ci240, and ci max 7500 scanners (with ci10/ci15 scan heads) via Starnode, and also Allen Bradley PLC-5/10, PLC-5/15 using the Allen Bradley Data Highway, and a PLC-5/40e via TCP on Ethernet. Also, wrote programs managing various label printers (Sato 8400/8450, Fargo, Zebra, and imaje) communicating via serial ports or TCP on Ethernet through microAnnex XLS interfaces.

Also specifically responsible for maintaining and writing test programs to validate our library of common code for reading configuration settings from files, providing local IPC services via named pipes, and communication via serial, Allen Bradley Data Highway, UDP, and TCP interfaces.

Contract Developer (10/93 – 1/94)
Applied Automation Techniques, Miami Lakes, FL
Embedded PCs, DOS, Borland C/C++
asst. industrial hardware peripherals

Added new features and fixed existing bugs in a prototype application for Ryder that managed fueling operations for their rental trucks. The application ran on a Telxon hand-held DOS PC and was written in C. The program uploaded collected data to other computers via serial protocols.

Wrote new modules that interfaced the Telxon hand held PCs to external hardware: Dallas Semiconductor memory buttons, scanners, and thermal printers.

7/93-10/93   **Contract Developer**
AT&T Universal Card, Jacksonville, FL
SunOS, Sparcstations, OpenLook, C, SCCS, RCS, postscript

Added new features and fixed existing bugs in software used by the customer service personnel answering phone calls from cardholders. The software was written in C and ran on Sun Unix systems presenting an OpenLook user interface that retrieved data from an internally developed, proprietary database interface.

Added features to the billing statements printed on postscript printers. Repaired inconsistencies in the applications' OpenLook GUI.

Developed an in-house OpenLook application to manage status reports and generate reports to postscript printers.

2/87-1/93   **A1C – Sgt, United States Air Force**

Sgt, Senior Software Applications Programmer (2/91 – 1/93)
1856th CSGP, Ramstein AB, GE
RISC Hardware/Software Center
DECstation 5000/200, Ultrix, Motif, X Window, C, TCP/IP

Ported existing mainframe terminal applications for the USAF Intelligence Office on Ramstein AB, GE to a Unix workstation/GUI environment as part of a team of five programmer/analysts.

The original programs were written in Model 204 on IBM 3081s using character-based terminals. The ported programs were written in C for DECstations running Ultrix using Motif user interfaces built in UIL. The team added a plethora of new features at the request of the intelligence analysts to take advantage of the GUI environment.

Responsible for managing user interface consistency across multiple applications. Wrote code utilizing the X Window API to solve low-level graphics problems and wrote code for interprocess communication to connect several applications. Handled the optimization of code doing long-running computations.

Applications Programmer/Network Instructor, SrA/Sgt (11/88 – 1/91)
US Air Force, 1856th CSGP, Ramstein AB, GE
IINCOMNET Project Management Office
VAX 8530, MicroVAX II, VMS
IBM PCs, Borland C, DOS, Frontier Technologies TCP/IP, Watchdog Security Software

In charge of technical support and training the users of PC class workstations on a government version of the Internet approved for handling Secret level classified information.

Installed and configured hardware and software at sites on the network across all of the European theater. Trained new users how to operate the computers and use the Internet software. Wrote utility programs in C for DOS PCs and VMS equipped MicroVAXes.

Programmer, A1C/SrA, (7/87 – 10/88)
US Air Force, 1856th CSGP, Ramstein AB, GE
Command Intelligence Software Systems
IBM Mainframes, TSO/ISPF, Model 204, COBOL, Fortran
Eaton 2000 IWS, Opus Unix, C, GKS
AT&T 3B2, Unix System V

Wrote applications for the intelligence analysts of HQ United States Air Forces in Europe. The programs were written for IBM 3081/4341 mainframes in Model 204, COBOL, and Fortran.

Also wrote small utility programs in C for a proprietary workstation (Eaton 2000 IWS) using Unix with a proprietary GKS-like graphics environment, and also for AT&T workstations running Unix.

Programmer Trainee, A1C, (2/87 – 6/87)
US Air Force, 3419 STUS, Keesler Air Force Base, MS
Air Force Technical Training.

Graduated from Computer Systems Technical Training courses with an Honor Graduate Certificate representing an average grade over 96% through the entire course. Classes were eight hour days, five days per week covering COBOL, Fortran, Assembly Language, Networks and Communication Protocols, and System Management.