

CHARLES T. HARRIS

Telford Technologies, Inc.

2912 Hibbard Street

Oakton, VA 22124

703-969-0022/charris@telfordtech.com

**Technical
Summary**

25+ years experience in software/hardware design and system integration. Senior level architect/developer for client/server applications including database components, utilizing agile development methodologies. Experienced in managing and implementing version control, defect reporting, unit testing, and product installation. Experienced in developing software in a regulated environment for medical and pharmaceutical applications. Experienced in developing communications services to interface with application specific devices such as medical instruments, laboratory instruments, and telecommunications equipment. Excellent communications skills. Fast learner capable of quickly integrating into new environments.

Languages

Microsoft Visual C#, C/C++, & Basic; Java; Perl; Borland C/C++; Turbo Pascal; RPG III; Fortran; Intel Assembly; Visual Studio 2010/2008/2005; Eclipse; NetBeans; LabView

**Operating
Systems**

Windows 7, Vista, Server 2008, Server 2003, XP Professional, Mobile, 2000 (Server and workstation), NT 4.0 (Server and workstation); Android; Symbian OS; Linux; Novell

Libraries/API

.Net Framework SDK, Windows SDK, Win32 SDK; .Net Remoting, ASP.Net, MVC3, DevExpress, Linq, Entity Framework, DCOM; ATL, ODBC, RPC; Microsoft Foundation Classes; Android OS SDK, Symbian OS SDK; Crystal Reports

Tools

Team Foundation Server; Rational Modeler, Clearcase, Clearquest, RequisitePro, Purify, PureCoverage; InstallShield; Crystal Reports; Subversion; NuMega Bounds Checker, SoftIce; PVCS Version Control, Configuration Builder; RedGate SQL Tools, VMWare workstation and server

Database

MS SQL Server 2008, 2005, 2000, 7.0, 6.5; PostgreSQL; MS Access; Pervasive Software Btrieve, Scalable SQL; Raima; Oracle

Project Summary

1993-present

TELFORD TECHNOLOGIES, INC. OAKTON, VIRGINIA

Technical consulting in the area of computer software and computer controlled system design, implementation, and integration.

**MSB Associates
2011-2012**

Web server based security appliance utilizing Windows Server 2008 R2, SQL Server 2008, IIS 7.5, MVC 3, DevExpress, Visual Studio 2010, and C#.

**QRC
Technologies
2010-2011**

Lead senior software engineer responsible for maintenance and development of new features for Windows embedded application operating on a custom hardware platform utilized for active and passive fully autonomous survey devices for cellular communications networks.

**Siemens
Healthcare
Diagnostics
1994-2005
2009**

Designed and implemented client/server based medical data collection system using MS Visual C# with .Net Framework (Rapidcomm 3.0, 2.0, 1.0), MS Visual C++ with MFC (Rapidlink 1.0), MS SQL Server, Btrieve, and Crystal Reports. Application collects data from blood gas and coagulation analyzers and stores in application database as well as forwarding data to the main hospital database. Data collected from RS-232 and network connected instruments. All instruments can be controlled remotely over the network from supervisor workstations. Released five major versions from 1994-present.

**MSB Associates
2005-2006**

Developed Java based decision support tool for aiding IT managers in assessing security risks and making sound security software investments. Utilized Java Swing and Postgres SQL database.

**ArtINNet
2008-2010**

Design and implementation of cell phone voice authentication system utilizing REST based web service and SQL 2008 database backend with ASP.Net customer service web interface

- Electrochem**
2000-2005
2008
Fuel cell test system utilizing GPIB controlled load (upto 4000 watts), A/D, and D/A I/O cards. Fuel and oxidant gas control utilizing mass flow controllers. Control software provides user with control of all test parameters, graphical display of test results, and the ability to program a sequence of test steps to simulate a variety of dynamically changing load conditions.
- Locamotion**
2000-2001
Design and implementation of “middleware” communications service for handling communications to and from GPS/cellphone vehicle tracking system.
- Honeywell Data Instruments - Wintriss Controls**
1995-2003
Designed and implemented client/server based factory data collection system using MS Visual C++ with MFC and Pervasive Btrieve. Application communicates with metal stamping presses equipped with Wintriss Control products. Collected data is stored to database. Changes in key operating data is communicated via RPC to all connected workstations. System supports multiple data collection and user workstation computers. Released three major versions from 1995-2003.
- Septech**
1994-1995
Computer control of liquid chromatography system using Visual C++.
- Ziff Desktop Information**
1993
MS Windows application utilizing Borland C++, Blaise Win++ library, and Dataware ADL for search and display of 3 different CD-ROM databases built with Dataware CD-Author. Implemented virtual listbox control capable of displaying up to 2^{31} items. Developed and enhanced various aspects of user interface in context of very large sets of information to be displayed. Audited program to insure proper allocation and freeing of memory and other system resources.
- WEETECH Inc.**
1993-1996
Computer controlled test system utilizing PCs, GPIB instrumentation, and custom PC controlled instrumentation programmed in Turbo Pascal for testing weapons systems. 5 test systems with 9 operator stations. Novell network linking all test systems.
- 1989 - 1993
1986 - 1989
Demonstration disk for ATE software package utilizing Instant Replay Professional for building the scripts and animation.
MS-Access database for analyzing test results from automated test equipment systems
WEETECH INC. SHARON, MASSACHUSETTS
AUGAT INC. ATTLEBORO, MASSACHUSETTS
- WEETECH, Inc. is the US subsidiary of WEE GmbH, Wertheim, Germany, a manufacturer of computer controlled high and low voltage interconnection test equipment. In 1989, Augat Inc. sold their interest in WEE GmbH
- MS-Windows graphical assembly aid software for use with cable and harness test system to provide graphical information to the operator about correct routing and connection of wires. Microsoft C/C++, Windows SDK.
- Development, enhancement, and maintenance of integrated software package for controlling and programming PC controlled cable and backplane test systems using Turbo Pacal. Software package composed of test program editor, pin table editor, test parameter editor, test program compiler, test program file management, and testing subsystems.
- Implementation of RS-232 NetBios based network to allow multiple dedicated microprocessor based cable testers to send and receive data from a PC which in turn may be a workstation on a LAN. Testers use Z-80 or 8051 family microprocessors. Programming in C on PC and using Nohau emulator for running testers.
- Implemented software revision control system using PVCS

1985-1986 APPLIED ROBOTICS, INC. LATHAM, NEW YORK

Developed sales and lead tracking, and product configuration databases for manufacturer of robotic peripheral equipment.

1981-1985 DATA INSTRUMENTS, INC. LEXINGTON, MASSACHUSETTS

Implemented marketing database system for tracking of leads, customer communications, and bookings and sales activity using DataFlex database.

Installed, implemented, and supported IBM PC's for spreadsheet and word processing applications.

Installed, implemented, modified, and maintained MAPICS manufacturing and accounting software on IBM S/34 and S/38.

Planned and implemented conversion from IBM S/34 to S/38 computer system

1980-1981 DATA TERMINAL SYSTEMS, INC. MAYNARD, MASSACHUSETTS

In-house development and installation of automated test equipment for functional testing of system boards using 8085 microprocessors programmed in assembly language.

1976-1978 TECHNICAL ANALYSIS CORP. ATLANTA, GEORGIA

Designed, installed, and implemented custom microcomputer based systems. Coordinated assembly, testing, and installation of systems.

Energy management data acquisition system for a paper mill using Data General MicroNova computer programmed in FORTRAN with Analogic data acquisition system.

Upgrade of master computer and operator stations for computer controlled photographic portrait printing system using Data General MicroNova computer

Developed dot matrix printer controller using 8080 microprocessor programmed in assembly language.

EDUCATION

1980 MBA Harvard University, Graduate School of Business Administration, Boston, Massachusetts

1976 BEE Georgia Institute of Technology, Atlanta, Georgia