Curriculum Vitae

(Course of Life)

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I am seeking contract positions performing process control design and configuration (programming) services utilizing Emerson Process Management's DeltaV Systems or upgrading PRoVOX Systems or other systems to DeltaV Systems.

<u>I require that I work from home: working on customer development and process systems.</u> <u>Communication for meetings, technical reviews and development should occur via WebEx or</u> <u>ZOOM.</u> I have been working from home since June 2007.

QUICK REVIEW

(Chemical Industry, Pharmaceutical Industry, Pulp and Paper Industry, Power Generation Industry, Nuclear Reprocessing Industry, and Oil & Gas Industry)

- 1. 27 Years DeltaV Continuous and Batch Design/Configuration
 - a. 1996-2002 DeltaV Training (11 Certified Classes Austin, TX)
 - b. Control Module Design (points individual, PBL and PCSD Classes)
 - c. Communication Module Design (PLCs, etc.)
 - d. Special Module Design (ProVOX migration, etc.)
 - e. Composite Design
 - f. Class Design
 - g. Sequence (FSC) Module Design
 - h. Equipment Module (EMs) Design
 - i. Phase Design
 - j. Batch Executive Design (Operations, Unit Procedures, Formula, Procedures)
 - k. HMI Design (including DVOP)
 - 1. Hardware IO Layout Design
 - m. Hardware Specification
 - n. P&ID reviews for designing Control System
 - o. Creating FDS (Functional Design Specifications)
 - p. Creating DDS (Detail Design Specification)
 - q. Creating Validation Documents for Batch Pharmaceuticals Control
 - r. Develop Simulation system for testing, CAT or FAT (Mimic and others)
 - s. Performing CAT (Customer Acceptance Testing)
 - t. Performing FAT (Factory Acceptance Testing)
 - u. Performing Customer/Plant Startups

- v. Performing Customer/Plant personnel training
- 2. 35 Years ProVOX Continuous and Batch Design/Configuration
 - a. P&ID reviews for designing Control System
 - b. Includes IAC, CFG, IFC and UOC Design/Configuration
 - c. Control Module Design (Points)
 - d. FSTs Design/Configuration
 - e. Batch Design (Operations, Procedures, Procedure Lists)
 - f. HMI Design
 - g. Created the CFD format for Monsanto Module Standards
 - h. Created the Monsanto Procedures Standard for PRoVOX
- 3. PRoVOX Migration to DeltaV (Details follows below)
 - a. 2002 Developed a standard procedure for Migration PRoVOX
 - b. 2014 Automated this Migration Procedure (Description follows)
 - i. CDV files to Excel Spreadsheets
 - ii. Build Bulkedit files
 - iii. Create a DDS with PRoVOX versus DeltaV Parameters

EXPERIENCE (Summary)

I have PRoVOX and DeltaV experience in performing design, configuration, and implementation of process control continuous and batch applications, performing start-up operations, and implementing Advanced Process Control (APC) applications. During these periods, I was involved in project management, project engineering, process design, control system design, configuration and system implementation.

Over the early years, I worked on many DCS systems and PLCs but came to the conclusion that an individual could only be great at a few or even one DCS system as their enhancements and control applications expanded. I thus chose in 1986 PRoVOX and later DeltaV to be my primary/sole DCS system for software and hardware design and implementation. I am pleased with this decision.

As a contractor since 1986 specializing in Batch/Configuration and implementation, I have been designing control applications (Continuous and Batch Control) for implementation on Emerson's (Fisher-Rosemount Systems') PRoVOX, and now Emerson's Process DeltaV systems (since 1996). I also worked on the design and implementation of Monsanto's Direct Digital Control (DDC) system in 1975. I designed installation of Monsanto's first PRoVUE (IAC,CFG) system in 1979.

During my career implementing PRoVOX/DeltaV projects, I have completed 78 individual projects and 22 team member projects for a total of 100 projects. (These projects can be viewed in my long resume.) I'm looking for that next great project.

DeltaV work has included Configuration utilizing standard DeltaV configuration and specialized DeltaV PBL and PCSD Class modules, Phases, Equipment Modules, SFCs, Control Modules, and graphic dynamos for continuous and batch control. Work has also included many projects

migrating PRoVOX to DeltaV and lately utilizing my Migration Tool to provide ease of migration and documentation.

As an electrical engineer with a triple major in Computer Systems, Control Systems, and Communications Systems, I have been able to utilize my talents implementing continuous and batch control systems (hardware, software, and instrumentation) in the Chemical Industry, Pharmaceutical Industry, Pulp and Paper Industry, Power Generation Industry, Nuclear Reprocessing Industry, and Oil & Gas Industry.

MIGRATION TOOL DEVELOPMENT

I have designed a PRoVOX/EnVOX Documentation and Migration tool for migration to DeltaV. This implementation is a combination of the tools and individual work that I have performed manually over the past 24 years. As I worked for Emerson Process Management, their represented Impact partners (LBPs) and many users of PRoVOX systems, I developed many techniques and procedures that I standardized to create a Detail Design Specification (DDS) that represented the PRoVOX/EnVOX systems being migrated.

It is from these DDS documents that customers can implement the PRoVOX system into DeltaV systems. Or if not migrating to DeltaV, the DDS can be used for other DCS system implementation such as Honeywell, ABB, etc.

As part of this, I developed a work analysis tool to identify and estimate the man-hours to document the PRoVOX system, if performed manually. These estimates have proven to be accurate and have been used to provide cost estimates to customers.

The tool creates the spreadsheet of control module data for bulkedit into DeltaV. The bulkedit files are based on DeltaV Classes, either specific classes developed by the customer or the existing Emerson Process Management PBL and PCSD classes.

LANGUAGE PROGRAMMING EXPERIENCE

- Programming Languages includes assembler and high level languages;
- Languages includes "C", "C++", Fortran, Basic, Visual basic, and others,
- Assembler includes code for IBM RT, Intel 80x86 series, Z80, 6800, 68000 series, and TI990,
- Application languages include Fisher Controls' PRoVOX, EnVOX and DeltaV and Honeywell's' TDC 2000;
- Operating Systems include IBM VM, DEC VMS, Unix, OS/2, AIX, Windows, DOS, and others;

- Hardware Applications includes programming firmware for ROMs and PALs for Printed Circuit Boards and Microprocessor Systems;
- Software applications includes programming for PC Tape Backup and Communications Systems, Device Drivers and Hardware Interfaces, GUI (Graphical Users' Interface), Real-Time Process Control Systems, Graphics Systems, Robotics Systems, Vision Control Systems, Communications Systems, Local Area Network Systems, Military Display Control Systems, Pipeline Transformation System, Database Reporting Systems, and Statistical & Analysis Modeling Systems;
- Business applications include Design, Programming, and Implementation of Business Accounting software, Investment Modeling Analysis, Financial Planning Programs;
- Databases includes Access, dBase, Paradox, Sybase, Foxbase, Rbase, Oracle, Knowledgeman, and Ingress,
- Spreadsheets includes Excel, Lotus 123, Symphony, Quantro Pro, and others.
- Cad Systems includes AutoCad, Generic Cad, Integraph, AT&T, DataCad, and others.
- Web design includes HTML and Frontpage.

SCIENTIFIC / ENGINEERING EXPERIENCE

- Logic analysis and computer simulation of IBM's RT-RISC chip logic (IBM's RS/6000), logic ETE (Early Timing Estimate) Analysis, and logic debug;
- Software development concentrated in Real-Time Computer Process Control Applications;
- Design, configuration, and implementation of Process Control applications implemented on Monsanto's DC2 system, Fisher Controls' PRoVOX, EnVOX systems, and DeltaV Systems and on Honeywell's TDC 2000 System.
- Development concentrated in Computer Integrated Manufacturing, hardware and software;
- Computer simulation of Process Modeling and Statistical Analysis;
- Software development concentrated in SCADA Systems (Supervisory Control and Data Acquisition)
- Digital & Microprocessor circuit design, board layout, and firmware programming; and
- Implementation of Local Area Networks, LAN, using Fiber Optics, from basic RS232 to Node and Token Ring Systems.

WEBSITE / HTML PROGRAMMING EXPERIENCE

- 1994 Developed First Website using text editor. (Website: DBStuart.com).
- 1997 Upgraded Website using Microsoft's Web editor: Frontpage.
- 2001 Switched to Microsoft's Web editor: Expression (beta then version 1).
- Since have upgraded to latest versions of Expression.
- Have programmed in HTML, current working with HTML 5.

• Since 2002, I have created multiple websites for myself and many more for clients including e-commerce and personal websites.

BUSINESS / FINANCIAL PROGRAMMING EXPERIENCE

- Developed PC Computer based Financial Planning Software for First American Securities.
- Developed and Presented Financial Planning Seminars for First American Securities.
- Trained over 5000 agents in the insurance and securities business utilizing software programs.
- Obtained Insurance and Securities License to learn business for developing software programs.

EDUCATION

B.S. Electrical Engineering, Mississippi State University (1971): Triple Majors in Computer Systems, Controls Systems, and Communications Systems

MBA - Masters in Business Administration, Mississippi State University (1978): Double Majors in Management and Finance

SECURITY CLEARANCE

Government Security Classification: ***SECRET*** (Initial:1967 renewed: 1982 - Currently Inactive)

PROFESSIONAL

Institute of Electrical and Electronic Engineers (IEEE) The Instrumentation, Systems, and Automation Society (ISA) Association of Computing Machinery (ACM) Computers in Mechanical Engineering (CME) Society of Manufacturing Engineers (SME)