



Technology Services, Inc.

SUMMARY:

Senior/Lead Systems and Software Engineering Specialist with over 30 years experience. Capabilities include consulting, system recommendations, architecture, analysis and design, software development, hardware, implementation and support. Expertise includes ATE, Test Stands, LabVIEW (numerous versions), Certified LabVIEW Instructor and Developer, military, avionics, aerospace, and various communication protocols. Currently holds an active Secret Clearance.

TECHNICAL SKILLS:

Sr/Lead Test Engineer (9+years) 1973 – 1982, 1985, 1996-1997, 2002 – current
- A Software Proj Leader specializing and expert in Automated Test (12+ years) 1992 – present.
- A Mentor and College instructor (11+ Years) various times 1983 - 2004
- A Technical Writer (28+ years) 1977 - present
- A National Instruments Certified Instructor in LabVIEW, DAQ (10+ years) 1995 – present.
- LabVIEW, TestStand, RS232, RS422, GPIB, SCXI

EMPLOYMENT HISTORY:

Some employment overlaps. Often had two jobs or contracts.

2004 – Present; Dept of Navy / NSWC Carderock / Code 5400 / West Bethesda MD

LabVIEW Test Engineer.

2008-2009; Honeywell; Sr./Lead Engineer

2007-2008; Moog Aircraft; Sr./Lead Engineer

2002 – 2004; Input/Output Inc.Stafford TX / Staff. Engineer

2000 – 2002, 2004; Continental Disc Corp – Liberty MO / In-Phase Tech – Clarksburg NJ / Otis Elevator –Bristol CT div. UTC / Parker Hannafin – Kalamazoo MI / Consultant, Sr. Sys Engineer or Proj Manager with Test Systems for Hydraulic Pumps and Motors.

1997 – 2001; Corning Inc / Sr. Test-Systems Engineer

1996 – 1997; ATS, Inc. Mesa AZ / Consulting to Goodrich / Motorola / Rockford / Lucent / Microchip / Intel / Exxon / Sr. Sys Eng – Proj Mngr.

1983 – 1996; Medtronic Inc / Project Product Technician (T5)

1983 –1985, 1989 – 1993, 1999 – 2001; Phoenix Institute Technology - Phx AZ / High Tech Institute Phx AZ / Central Arizona College - Mesa AZ/ Corning Community College NY / National Instruments / Instructor.

DETAILED EXPERIENCE:

Honeywell: 2008-2009

Lead SW/HW Sr. Test Engineer to design software and hardware systems to test avionics. Write or rewrite device functional and final tests. Clarify existing procedures. Prepare for outsourcing.

Moog Aircraft: 2007-2008

STSI P.O. BOX 547 Wellsville, NY 14895 (585) 593-4241 FAX (585) 593-4309

info@summit-tsi.com

www.summit-tsi.com

Lead SW/HW Sr. Test Engineer for Boeing 787 component endurance testing. Responsible for all phases of design and development of endurance testing of several components, ATS, GPIB, LabVIEW RT, LabVIEW FPGA, PXI, Serial, Hydraulics, V&V, and drawings.

Carderock – 2004 – Present

Title:LabVIEW Computer Scientist Expert. My specific work involves the following:

To rewrite existing Fortran Code into LabVIEW. To establish coding practices and standards for programming at Carderock. To train and mentor any programming personnel in those standards and practices. To solve difficult software problems and provide the software solutions. To Lead Software Project Teams, Design software/hardware architecture, design project management of the software projects where necessary, to establish procedures to test, qualify and implement new software.

To analyze and evaluate Carderock projects and recommend hardware/software solutions. To conduct design reviews, design analysis, code reviews, establish requirements, and monitor progress.

To assist during sea trials in the collection and analysis of data.

Input/Output – previous position – 2002 – 2004. Sr. Test and Manufacturing Engineer

My specific responsibilities included.

As a Sr. Test Engineer... Performed design tasks for hardware that could not be bought off-the-shelf for testing the company's products. Performed feasibility studies, requirements definitions, design of the hardware, design of supporting software, producing all of the associated documents, obtaining drawings, procuring all necessary components, presenting proposed project for approval, Defining project tasks. Test Engineering Department... Led several Engineers, Technicians, Tech Writers, and other support personnel.

My main charter with the Test Engineering

Led several Test Engineering teams in my group. Each one had a specific Data-Acquisition task or Continuous-improvement tasks through the failure analysis process. Introduced to them Best Manufacturing Practices, and Numerous data acquisition methods appropriate to the specific task. This environment was leading-edge technology with short life cycle and rigorous Hi-Rel standards. Was the project lead for several Technical-Documentation projects and personnel involving all levels of documentation. (E.g. User Manuals, Requirements, Standard Operating Procedures, Help Files, etc.)

Otis Elevator – 2002

Hired specifically to bring order to chaos at the company's environmental test and quality department. As the Lead of the Data Acquisition Team in this department, I introduced standards and practices (by documentation and training) for code development, architecture, and methods of data acquisition. I worked very closely with Team members as mentor/trainer to challenge them to learn better how to produce design architecture, produce the design, and document the design. I demonstrated the effectiveness of good coding practices, well thought-out designs, and appropriate test methods. I led this team to produce successfully, several projects during my brief tenure. Chief among my responsibilities was to teach the Team Manager, how to manage his Team on software/hardware projects, how to make buying decisions, how to understand difficulties and produce solutions, how to validate, qualify, and create Data-Acquisition results that were easily verifiable, repeatable, and understandable. In other words, I was tasked with providing this Test and data acquisition group with a workable model for all future work and teaching them how to work inside the model, so that when I left it the program would continue to run well. This was accomplished within three months.

Summit Technology Services, Inc./Corning, Inc. 1997 – 2001

Was hired as a Team Leader, Project Leader, Data Acquisition, LabVIEW, and automated test expert. My work included: Working in the Photonics Division that created the Test and Data Acquisition TEST STANDS for the various photonics products of Corning. Was software project manager for several teams of programmers, engineers, and technicians. Was responsible to design the software architecture, develop the software project plan, identify necessary resources, assign tasks, manage the entire development

process, solve problems, adapt software design to developing hardware design, perform prototype tests and evaluate results, implement the test stand in production with full qualification for ISO9000 environment. Also was responsible to establish post-implementation procedures for periodic maintenance, software enhancements, and adapting to any product changes. My responsibilities included interviewing and qualifying ALL incoming personnel into the test engineering and data-acquisition department. No one was hired as a software engineer or programmer without my recommendation. During my tenure, more than 30 were hired at my recommendation. On several occasions, I was installed into ad hoc troubleshooting teams to help solve critical problems in manufacturing. On one such team, I invented a solution that reduced test time by more than 50%, allowing the goals to be met.

Continental Disc – 2000. Was contracted by Continental Disc by recommendation from National Instruments as a recognized expert in LabVIEW, data Acquisition, and test engineering. My work here included:

Walking the entire test group through the process of defining the requirements for the test process they wished to implement. Using those test requirements to generate the requirements documentation and design the software architecture. Providing methods through documentation, demonstration and teaching, how to convert the software architecture into code. During this process, I supervised the team as they generated the code, and generated some of the code myself. Providing methods through documentation, demonstrations, and teaching, how to test/debug the code efficiently and accurately. How to validate the code, and how to establish and document test results to qualify the code and the hardware comprising the test system. Again, my role was to enable their test group to understand the process, provide them with the models, and train their Sr. Engineers in best practices for Test Development and Engineering.

ATS, Inc. 1996 – 1997

Was hired by ATS as a Sr. Software Engineer and Project Leader by recommendation from National Instruments as an expert in those disciplines. My role included: Assisting the sales engineer in presenting and acquiring contracts for Test Engineering work. This included providing preliminary designs for the software and hardware architecture relating to the customer's requirements and sometimes a feasibility study. With the contract in hand, I completed the software/Hardware design documents and designed/defined the project tasks, thus producing the Project TimeLine, Milestones, and evaluation of resources needed. I then hired contractors, as necessary, made assignments, supervised all work, did some of the work, managed version control, resolved all issues, and led the project team to the conclusion of the project with implementation.

Medtronic – 1983 – 1996

Although I had many different roles at Medtronic, the related experience began in 1991. My roles included: Developing new test system from scratch. Was the Project Lead to develop the test system for a new product. At Medtronic, this was a tedious and lengthy process because of the ISO9000, Hi-Rel, and FDA environment. Defined, proposed, and won approval to engineer the new test system hardware and software. Supervised a technician and worked closely with other engineers and technicians to develop the requirements. Designed the hardware, the technician built it, and designed, tested, and qualified the software. During the process (2 years), introduced new software standards and practices, including unit testing of the software, and drew attention because the methods that were used produced a test system more thorough, more robust, and in less time than any previous system at this company. At management's request, documented my methods, and presented them to a management team for evaluation. After my presentation, management chose to implement my methods throughout the division. Systematically trained each department in my methods, presented a paper on those methods at a National Instruments symposium and a brief synopsis of my methods was included in an Instrumentation Newsletter published by National Instruments. My team single-handedly "had produced the best data acquisition test and measurement system ever conceived (to that date) by any Medtronic employees." So were the words of management as they presented the plan to implement division wide.

In 1995, I was called to Minneapolis, to begin implementation of my methods company-wide. I trained other trainers, and left in 1996 to begin consulting. I left behind trainers and experts who are still teaching my methods today.

EDUCATION and CERTIFICATIONS:

4 years college; Major: Electrical Engineering / Minor: Communications / Honor Society.

National Instruments Certified Instructor

National Instruments Certified LabVIEW Developer

FCC Commercial Radio Operator License

Teacher Certification Maricopa County AZ