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LabVIEW Software Engineer with over 15 years experience, available to design and implement custom LabVIEW applications for automated testing, data acquisition, and instrument control.

Major Accomplishment:

Creation of **TAZ,** a system test automation tool - this custom command language application revolutionizes the test automation of complex systems. **TAZ** was designed to minimize the maintenance of test cases. With **TAZ**, test engineers with no programming experience can quickly automate tests using multiple DUTs, Network Elements, and a variety of instruments. The design is commercial quality with intuitive graphical interfaces and robust error prevention at every level.

A few features of **TAZ** are: save and recall setup configurations, record to databases, schedule times, talk to multiple network elements/instruments, sweep variables, switch fibers, power cycle DUTs, run diagnostics, send emails, write fully documented logs, view and manually control testing (including instruments) in real-time for debugging, run legacy test cases written in many programming languages, and much more.

Some of the instruments **TAZ** has controlled are OmniBER, TekOTS, Exfo/Gnubi, SmartBits, AX4000 (Adtech), TestCenter, IneoQuest, Ixia, DiverifEye, Fortissimo, Abacus, Anritsu, Acterna/WG, and Agilent Router Tester, Agilent Vector Signal Analyzer, Power Supplies, Attenuators, BERT Scopes, Spectrum Analyzers, over many communication protocols including Ethernet, GPIB, VISA, COM, USB, and Serial interfaces. **TAZ** communicates through SONET, SDH, TL1, SSH, CLI, SQL, TCP/IP (Telnet, FTP), and SCPI. Mercury Quality Center (TestDirector), WinRunner, MS Access, and SQL Server are also supported.

Experience:

Principal, AZTAZ Software, LLC, June 2005 to present
Projects include:

- **TAZ** - the system test automation tool that gives engineers with no programming experience the ability to automate their manual test cases.
- Testing of RF instruments for 3 major instrument manufacturers
- Photovoltaic wafer test station for manufacturer's R&D department
- Solmetric - Solar instrument to maximize array efficiency
- SyntheSys Research - Created applications for optical instrument manufacturer to be sold as add-ons to the BERTscope instrument. These applications expand the market appeal and functionality of the instrument by automating common time-consuming tests and integrating third-party instruments into the test configuration.
- Luxim - Automated life cycle testing system for an optical component manufacturer. The system asynchronously controls 128 independent DUTs, each with 2 temperature controls, PowerON-PowerOFF schedules, multiple DAQ measurements, emergency alarms and emails. Since this testing will run over two years, the system was designed to survive any single point of failure, including PC crashes, by a combination of database, file, and runtime controls.
- Database monitoring and analysis programs.
- Instrument command testing.

- Biotech application for controlling and measuring pH of a reaction.

Automation Software Engineer, Mahi Networks, Petaluma CA, May 2000 to June 2005
Accomplishments include:

- Automated testing of the Mi7 metro box for SONET and Data
- Automated testing of the Photuris DWDM
- System Test Application - Created flexible Telecom Test automation system, Test Executive and Test Engine. Used for functional, regression, stress testing, and diagnostics. Thousands of tests have been automated with very minimal maintenance.
- Designed and built an instrument for laser switching with telnet access that can be used as standalone or controlled by other programs.
- Optical Transponder Application - Test Executive and test modules for 14 tests, interfacing with 11 instruments via GPIB with database connectivity.
- Telecom Telnet Client –telnet application used company-wide that adds timesaving functionality to a Telnet client.
- Automated inventory assessment program.
- Tools - many smaller applications that increase productivity.

LabVIEW instructor, Sonoma State University, January 2001 –June, 2001

- Taught introductory LabVIEW programming

Schaffer Co., Principal, Petaluma CA, February 1996 - April, 2000
Projects include:

- Instrumentation. GPIB control of the HP 4192A Low Frequency Impedance Analyzer. Added functionality and automation by programming the instrument to:
    - Automatically sweep frequency, test signal amplitude, and bias over multiple runs.
    - Save, retrieve, graph, print and analyze data.
    - Track instrument generated errors.
- Data Acquisition. Laptop with data acquisition of nine channels of seismic data for multiple users. With this program each user can:
    - Define and store configuration files or choose a default.
    - Acquire and save binary data with an ASCII header for speed and portability.
    - Dynamically view 1-9 channels of strip chart data in real time.
    - Choose a time window and channels for FFT spectrum analysis while acquiring data.
    - Graph and analyze previous acquisitions including spectrum analysis, windowing and filtering.
    - Print graphs, configuration and acquisition data.

Education:

Florida International University
Rensselaer Polytechnic Institute

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