Ed Scott Johnson

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SECURITY/DEVELOPMENT PROFESSIONAL SUMMARY

Effective security professional with strong business acumen, exceptional technical skills and extensive experience in the high-tech industry (federal and commercial). Highly skilled leader who is able to instill confidence in customers and internal teams. Deft analyst versed in evaluating and providing relevant security business solutions to address an ever changing environment. Excellent communicator with strong presentation skills and experience in the coordination and implementation of comprehensive cross functional security solutions. Creative thinker with expertise in the creation and execution of new initiatives, the ability to understand and translate both functional and technical concepts, and an outstanding background in pre and post sales environments.

CAREER HIGHLIGHTS

- Developed and successfully implemented secure voice biometric system used by hundreds of call center technicians in more sensitive environments.
- Developed, implemented and maintained security policy management system widely used across over 100 end customer call centers.
- Developed “Event Trigger” system that can securely monitor call center agent computer activity and signal security and management when defined “suspicious” activities occur in real time.
- Helped develop, field and support complex, high reliability, network distributed control and data acquisition system for a major DOE accelerator facility.
- Lead development team and fielded complex multi-loop real time (µs level) beam control and adaptive optic system to deliver full laser power to a fast moving maneuvering target.
- Lead development team for timing and trigger generation systems able to generate ns level simultaneity between remote sites/systems with minimal communication.
- Lead development team one of the first DSP based, fully programmable satellite and missile telemetry processor for Air Force Space Command.
- **Inactive Security Clearances including DOD Top Secret, DOE L, numerous SCI**

PROFESSIONAL EXPERIENCE & ACHIEVEMENTS

SENIOR ARCHITECT 2008-PRESENT
Teleperformance Group Inc. 6510 Millrock Dr., Holladay, UT. 84121

- Systems and Application programming for Worldwide IT/Security organization.
- Collaboration across multiple call centers located across the world. Includes development of TP Passport voice biometric authentication system including server and database components, Asterisk PBX interface module, web and windows native clients for training and verification, Single Sign On system integrated with TP Passport, and a secure provisioning system with both interactive and XML-RPC interfaces to allow clients to provision our agents directly.
- Web based Security Policy database application which tracks all standards, requirements policies and procedures for TP global security organization, tracks compliance, provides reports, internal role based access controls and other features.
- Provided custom interfaces between third party language trainer and internal e-Learning system
- Provided custom interface between internal e-Learning system and HR and corporate reporting systems.
- Developed “Event Trigger” system to monitor configurable activities such as form submission, copy/paste operations, selecting specified functions in a given application in a specified context. When defined events occur they are forwarded to an existing database and displayed in an existing proprietary monitoring solution to both management and security teams for further action in real time. System runs in severely resource constrained virtualized workstations with minimal impact on performance across 4 windows operating system versions.
- All projects include documentation and training for all impacted global businesses.

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PROFESSIONAL EXPERIENCE & ACHIEVEMENTS

SYSTEMS ENGINEER 1993 -2007
Voss Scientific/Voss Scientific Inc. 420 Washington SE Albuquerque, NM. 87801

- Systems Programming and embedded software in C, C++, and Assembly; chiefly of device/hardware drivers, (OS and user level components) and custom control systems. Chief architect of DAAAC 4.0™ Acquisition and Control sub-systems including all of the interface classes, specifications, and user manuals for custom interfaces. DAAAC is a heavily multithreaded, high reliability, distributed data acquisition, analysis, archival and control system. Designed and implemented anti-piracy system, cryptographic feature keying system, error/info logging system, network interconnection architecture and libraries which includes IP Multicasting (PRIOR to IETF standardization), RPC, TCP, UDP sockets, named pipes, streams based GPIB, RS-232 and CAMAC I/O and others.
- Mentored and lead new hire engineers on complex projects.
- Led development effort for GPS based timing generator by providing design specifications, software architecture, managing direct reports, managing costs, and reporting to project customer.
- Hardware design through implementation, software design, managed and assisted software team and maintained low (battery) power, computer controlled, high voltage power supply system.
- Managed development of real time control systems for laser beam positioning and adaptive optics systems running under both windows (client) and LINUX. These are fast real time systems that are multithreaded and networked for control and status.
- Hardware design including RF analog signal processing (microwave receivers, and RADAR), high speed trigger/timing generators, serial data stream simulators, PCI bus mastering interfaces, IRIG stream decoding, IRIG time decoding, and others. Fluent in the use of Mentor Graphics PADS suite, ORCAD tools, Verilog. Principle designer of PCI Quad Telemetry Processor, various airborne and balloon borne experiment packages including telemetry hardware and software.
- Design, operate, and support with specialized software, special instrumentation including: high speed x-ray flash radiography, optical phase measurement, optical auto-correlators, x-ray imagers, IR-cameras, radiological monitors, antenna measurement systems, magnet mapping systems, accelerator beam control and diagnostic systems and many other specialized data acquisition systems.
- Database design and implementation using jet engine, MS-SQL server, MySQL. C++ ODBC, DAO and ADO access to all 3 under windows.
- Developed an XML based Hardware Abstraction Language prototype for airborne data acquisition instruments.
- On site customer support at National Laboratories including Los Alamos National Laboratory, Sandia National Laboratory, Air Force Research Lab, and others.
- Field test management and support at various national test ranges.

ENGINEER 1989-1993
MIT Lincoln Laboratory / Manpower Inc. Building 34560 White Sands Missile Range
E.T.S. / GEODSS Field site Stallion Gate, New Mexico

- Custom CCD camera development and maintenance. EBSICON camera maintenance.
- VAX system administrator, Initial Orbit Determination/Correction, Propagation software maintenance. Custom Video processing hardware, and software development.
- Embedded systems design, development for telescope control, [optical] filter wheel control, custom human interface modules, etc.
- Chief hardware engineer for Transportable Optical System (transportable, optical space surveillance system) during design, construction, and first deployment to San Vito NAS, Italy.

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EDUCATION

MASTERS OF SCIENCE MATHEMATICS (FUNCTIONAL ANALYSIS) 1989-1991
New Mexico Institute of Mining and Technology Socorro, New Mexico

BACHELORS OF SCIENCE MATHEMATICS/PHYSICS 1983-1984, 1986-1989
New Mexico Institute of Mining and Technology Socorro, New Mexico

SKILLS AND EXPERIENCE

Computer languages
- C#, C++, C, Java, x86, 68xx(x), PIC, Z80 Assembly, FORTRAN (IV,77,90)
- PHP, PERL, Python, HTML, CSS, SQL, XML, MFC 4.0 and greater, .Net
- MS Visual Studio, XMLSpy, Install Shield, gcc, Boost, STL, Kdevelop, Eclipse

Methodologies
- AGILE / TDD
- Waterfall
- eXtreme Programming

Technologies
- TCP/IP, IP Multicast, DCE RPC, Named pipes, SNMP v1
- Windows NT/2000/XP device drivers, LINUX device drivers
- Multithreading, multitasking, synchronization, exception processing
- Advanced GUI development with HTML5/AJAX, JQuery, ASP .Net, MFC, .Net, Qt, Swing, PHP/HTML
- Real time control, PID, state control, hybrid, Kalman filter
- SQL, ODBC, DAO, MySQL native, DAO/Jet native, MS-SQL Server native.
- IEE-488, CAMAC, VXI, VISA, SCPI, CAIS, 10WIF, SCSI, IRIG 106-00

Operating Systems: administration, use, installation, software development
- Windows 2008 server, Windows 8.1, 8, 7, Vista, XP, 2000, NT,…
- LINUX (Slackware, Gentoo, Fedora, Centos, Knoppix, uClinux)
- VMS
- Solaris, IRIX, ATT Sys V UNIX, Free BSD, other UNIX variants

Hardware design
- Mentor Graphics PADS, ORCAD, Futurenet/DASH, Verilog
- Analog, RF analog (to S band)
- Mixed signal (A/D, D/A signal conditioning etc)
- Discrete logic, gate arrays from 16L8 to 200,000 gate equivalent F.P.G.A.s
- Embedded micro-controllers 8-32 bits, DSP, hybrids

Field testing and test management
- Video / audio recording
- RF and other data acquisition
- Custom test control hardware and software
- Networking (wired, FO and RF)
- General secure communications
- Safety / Interlock
- General O&M support
- Test design / data analysis / reporting