Summary

Skilled self-starter with 25+ years Executive, Departmental & Team Management and hands-on experience in Fortune 50 organizations, small businesses and startups. Skillful resolution of complex problems. Very experienced in the full application development cycle. Demonstrated ability in the crafting of strategic plans and interfacing with internal and external management, peers and partners. Respected for interpersonal skills, integrity, leadership and especially computer knowledge and principles.

Speaker:

See LinkedIn page for more presentations

BSides Las Vegas August 2017, Las Vegas, NV - Video - F! Passwords - Passwords? Who needs those anymore. An examination of attempting to use 2FA for all corporate functions. (53 min)

LOC World October 2016, Montreal, CA - LSP Threats - Are you Safe? - This interactive presentation will address different threats to the language service provider (LSP) industry including payment fraud and cyber-attacks, and what companies can do to protect themselves. The CEO and president of the fastest-growing LSP in the world and a cyber security analyst/ethical hacker will each offer their expertise.

Syntax Code & Craft Convention May 2016, Charleston, SC - Under the cloud - A technical review of openstack and the various components that make up this modern infrastructure automation technology and get a basic understanding of how they fit together and how some basic commands such as building a server, snapshots, image attachments, load balancers and automation are worked through the system.

IT Hot Topics Conference May 2015, Greensboro, NC - Holistic OpSec: Bringing application, server and network security together aka "When a security architect writes an application" - Presented a story of Operational Security as it is today and dug into an examination of a modern enterprise rails application. Reviewed application security best practices going through specific controls within the application, best practices in deploying and how to integrate application controls, local host and network firewall controls into a self monitoring, alerting and automated security system. (50 min)

BSides Charleston November 2014, Charleston, SC - Video - Holistic OpSec: Bringing application, server and network security together aka "When a security architect writes an application" (55 min)

Bright Talk January 2013, Online - Presentation - SSL: Trusted Protocols Can Lead to Disclosures & Compromises. This presentation overviewed the most common misconfiguration and assumptions used on internal and external deployments of SSL and discuss how I have designed and deployed solutions to mitigate this risk. (49 min)

Shmoocon Firetalk January 2012, Washington, DC - Video - A fire talk at ShmooCon on an embedded alarm project. (6 min)

Geekend November 2010, Savannah, GA - Introduction to Application Security & Security Programming (50 min)

SecurityOpus – "Business / IT & PCI Compliance" 2007 - Co-Presented with Mike Dahn
Two day training course to provide PCI solutions to Merchants, Acquirers and the IT staff that support them. What, Why & How of PCI, Legal Liability, PCI Audit Checklist, Tools for making your staff PCI ready, Documentation, Architecture, Encryption, Auditing, Vulnerability scan and Penetration testing, SDLC vs PABP and Patch Management. (2 x 8 hr days)

MIS Training Institute Conference & Expo on Mobile & Wireless Security, September 2002. Co-Presented detailed instructions on how Wireless networks are identified and technical information on how the 'carte' project utilizes identified information to graph possible bounds of wireless networks using satellite imagery. (60 min)

WRQ Customer Conference – Yearly conference of top customers of WRQ. Presented Wells Fargo solution for single sign-on Internet based access to mainframe systems.

Published:

"Hack Proofing your Wireless Network" by Syngress Publishing, 2002

"Managing IMAP" by O'Reilly, 2000 has sections on my Cyrus/SASL patches

Projects:

InfoSecQuote Founder / Creator / Developer / CISO / CTO / CEO - InfoSecQuote is the central place for businesses to meet information security service providers for security related projects such as forensic investigations, penetration tests, risk assessments or PCI assessments. Businesses will no longer be constrained to Google searches to find these critical service partners and service providers will be able to receive fully qualified project leads with all necessary business project details without spending hours in meetings answering the same questions over and over again.

BSides Charleston Since 2012 - Charleston, SC - Co-Founder / Board Member / Organizer / Fundraiser / Coordinator - BSides is a community-driven framework for building events for and by information security community members. The goal is to expand the spectrum of conversation beyond the traditional confines of space and time. It creates opportunities for individuals to both present and participate in an intimate atmosphere that encourages collaboration. It is an intense event with discussions, demos, and interaction from participants. BSides Charleston was started in 2012 and has been held at the College of Charleston annually. Since its existence BSides Charleston has been attracting security professionals from all over the Lowcountry area for this free security event.

Buy It Sell It Win It - Founder / Creator / Developer / CISO / CTO - Buy It Sell It Win It (BiSiWi) is a new method for resellers and other businesses to sell their products and a new way for buyers to optimize their purchases by gaining access to thousands of items that they can purchase or win for $1 bid! With each item purchased through BiSiWi a percent of the seller's processing fee is offered as a rebate to the buyer as BiSiWi bid rebates. These BiSiWi bid rebates can be saved up and used to purchase anything listed in the BiSiWi catalog or bid a single bid along with hundreds and thousands of others and potentially win the item with only 1 BiSiWi rebate ticket! Took the initial concept of the BiSiWi system and programmed 18000+ lines of rails code to implement the system. Fully integrated system with twitter, facebook and google with integrated and responsive security that changes the server or application responses based on input from attacks. Integrated payments through stripe and paypal and made the full system fully responsive to all sizes of browsers, desktop to phone.

Teensy Server Cabinet Alarm - Project Creator / Developer - A cabinet monitoring solution that is able to not only monitor for cabinet door entry but also has the ability to have temperature and humidity sensors (which we do not actually do in this initial proof of concept). The cabinet door alarm is based on a teensy 2.0 USB device that uses digital inputs to determine if magnetic alarm door switches are open or closed and then monitor their status with any standard monitoring system through a USB connection to the Teensy device.

RIRTools - RIRTools is a collection of python tools used to fetch, store, and process Regional Internet Registry and ASN/route published data. Provided patches for build_rir_database.py to import ASN and ASN-Route information from ripe / apnic / arin / radb / afrinic and routeviews.org and modified riracl.py to allow for ipset compatible ip output list as well as searching ASN descriptions to generate ASN lists or output ACL lists compatible with the rest of the output formats for RIRTools (iplist, iptables, asa, cisco switch acl, cisco router acl).

DMZS-sa-learn.pl - sa-learn is a perl script that reads 2 imap folders, spam & not-spam and processes them through SpamAssassin sa-learn to learn bayesian classifications. Integrated perl Mail::IMAPClient into a quick script that works with sa-learn. This allows spamassassin host to be any server and connect to one central imap server and process spam & ham classifications according to the users of those systems.

Carte - Project Creator / Developer – Wireless network bounds mapping application that creates Inverse Distance Weighted image maps that overlay on top of TerraServer satellite & Mapquest Aerial maps showing the possible range of discovered wireless maps.

F.I.R.E. – Developer – Forensic & Incident Response Environment - Bootable CDROM capable of providing immediate tools for performing Forensic analysis, incident response, data recovery, penetration testing & vulnerability assessment (documentation, testing, script hacker, Xapp(C)).

Air Internet - Creator, Developer – GNU Wireless Access Point administration and payment system enhancement for NoCat captive portal with support for Cybersource, Paypal & BofA payments.

Nocat Wireless - Developer – GNU Wireless Access Point (WAP) Authentication system for turning Linux & BSD systems into secured WAP.

Loghog Jabber - DMZS-loghog-jabber is a patch to loghog that will send either standard or batch notifications to specified jabber users.

Mysql-SASL Patches – Patches to Carnegie Mellon Simple Authentication and Security Layer to support Mysql as an authentication mechanism and allow cyrus IMAPd to support multiple instances with multiple config files (C).

Former Debian Developer: Icecast MP3/Ogg Vorbis audio streaming & the public key server (pks) used within the pgp public key network.

Certifications:
QSA - Qualified Security Assessor - Expired 2006-2012
PA-QSA - Payment Application QSA - Expired 2006-2012
VISA QDSP (Qualified Data Security Professional) - Expired 2005-2006
VISA QPASP (Qualified Payment Application Security Professional) - Expired 2005-2006

Business Experience

February 2022 -   **Head of Global Field CISO**
Current   **VMware, Tanzu**

Head of VMware Tanzu Global Field CISO office
- Lead and Manage team of Global Field CISOs
- Manage and coordinate global Field CISO team with all Tanzu customer security, risk, governance, compliance and security interactions
- Regular Interlock with VMware Office of CSO
- Perform regular security interlocks with all Tanzu product, service and leadership teams
- Analyze Tanzu product and services revenue security risk status to provide actionable recommendations to the leadership team.
- Educate and enable Tanzu field teams on CISO/Risk/Security/SecArchitecture and security persona and goals to streamline path to production sales and expansions
- Work with security partners both internal and external to ensure customers selected security products operate on Tanzu platforms.
- Partner with labs and services teams to streamline path to production workshops for new deployments, expansions or application transformations in highly secure or regulated customers
- Support marketing and product teams to produce blog posts, webinars, training and documentation
- Provide support for account team customer security support such as CVE, Penetration Test, 3rd party risk or contracts
- Conversations with customer E/S/VP of (Enterprise/Application) Architecture, Chief Architects, CSO, CISO

January 2020 -   **Global Field CISO**
February 2022   **VMware, Tanzu (acquired Pivotal)**
   Conversations with customer E/S/VP of (Enterprise/Application) Architecture, Chief Architects, CSO, CISO
   ● Anything related to Information/Cyber Security or compliance related topics.
   ● Customer security assessments
   ● Security architecture discussions and cloud native security workshops
   ● Discussions about industry and customer trends with customer CISO, security and architecture teams
   ● Partnering with the customer security teams to bring to VMware R&D information security feature requests for future product releases
   ● Working with customers and marketplace vendors to find synergy with cloud native security tools
   Conversations within VMware
   ● Coordinate security requests from customers to product teams
   ● Work with sales teams to complete 3rd party risk, PoC security test criteria and contract concerns with risk, privacy and security
   ● How to understand customer security asks and programs guiding security control requirements for customer tanzu deployments
   ● What to expect from customers in specific compliance markets (FFIEC/GLBA Financial Services, PCI Merchants/Banks, HIPAA Health Care, SOC2 Service Providers/Data Centers, etc.)
   ● What to look for for the customer Security Champion
   ● How to expect security involvement in the sales, dojo and lifespan of the relationship
   ● Any information security topics that have ever come up with customers
   ● Any standards requirements customers may have asked of VMware (ISO27001, SOC2, HIPAA, etc.)
   ● Co-Presentation opportunities around Information Security topics

August 2018 -   **Field CISO - Global CxO team**
December 2019   **Pivotal Software, Inc.**
   Conversations with E/S/VP of (Enterprise/Application) Architecture, Chief Architects, CSO, CISO regarding
   ● Anything related to Information/Cyber Security or compliance related topics.
   ● Customer security assessments
   ● Security architecture discussions and cloud native security workshops
   ● Discussions about industry and customer trends with customer CISO, security and architecture teams
   ● Partnering with the customer security teams to bring to Pivotal R&D information security feature requests for future product releases
   ● Working with customers and marketplace vendors to find synergy with cloud native security tools
   Conversations within Pivotal
   ● Coordinate security requests from customers to product teams
   ● Work with sales teams to complete 3rd party risk, PoC security test criteria and contract concerns with risk, privacy and security
   ● How to understand customer security asks and programs guiding security control requirements for customer tanzu deployments
   ● What to expect from customers in specific compliance markets (FFIEC/GLBA Financial Services, PCI Merchants/Banks, HIPAA Health Care, SOC2 Service Providers/Data Centers, etc.)
   ● What to look for for the customer Security Champion
   ● How to expect security involvement in the sales, dojo and lifespan of the relationship
   ● Security conversations with any Pivot :)
   ● Any information security topics that have ever come up with customers
   ● Any standards requirements customers may have asked of Pivotal (ISO27001, SOC2, HIPAA, etc.)
   ● Co-Presentation opportunities around Information Security topics

March 2018 -   **Chief Security Consultant, Advisor**
Present   **Agnes Intelligence**
   ● Collaborating closely with a working group of lawyers, judges, and technologists toward the creation of a comprehensive cloud-based legal architecture integrating advanced AI tools.
   ● Provided security advice and guidance for cloud and application development.

February 2017 -   **CISO, Founding Team Member**
June 2018   **Carpenter NY Development, LLC** (Denovo Commercial Community Bank)
- Created and implemented a multi-year InfoSec strategic plan.
- Created and managed InfoSec budget in accordance with InfoSec strategic plan.
- Developed InfoSec program and policies in accordance with FFIEC Guidance for Regulatory (OCC and FDIC) approval needed to open the bank.
- Developed and implemented InfoSec development guidelines based on OWASP standards for custom built bank applications.
- Assisted in review and selection of core banking system and all partner systems including remote deposit capture, know your customer, bill pay, credit cards, cloud file storage, help desk and customer relationship system by providing Vendor Management security review and sign-off of all partner systems and infrastructure through on-site visits and SIG/SOC/ISO reports.
- Worked with the Chief Risk Officer to perform security risk assessments against all bank systems.
- Worked with Risk and ITOps to develop user access management program including access approval and periodic audit for all bank systems.
- Worked with IT and Development teams to introduce and include InfoSec in development practices.
- Created InfoSec Awareness employee training program.
- Architected office and AWS cloud multi-zone/multi-region/multi-account segmented secure infrastructure.
- Designed all roles and access permission parameters for core bank system and all other bank systems.
- Designed office and bank branch physical security layout including camera placement, multi-factor access control system and alarms.
- Developed extensive multi-phase/multi-year/multi-vendor penetration testing program that includes testing of physical security for the branch (red-team), spear phishing and vishing attacks on critical bank organizations, in-depth application penetration testing against each release of internally developed applications (web, api, Android, iOS), application threat assessment and manual code review and industry best practices review of all Information Technology infrastructure and management systems.
- Identified, completed full vendor due diligence and negotiated contract with application security firm to embed security systems directly into in-house developed applications to provide development and production real-time application threat protection (DAST, SAST, IAST, RASP).
- Identified, completed full vendor due diligence and negotiated a multi-year contract for centralized logging and security information and event management (SIEM) of all office and cloud systems including custom in-house developed applications.
- Identified, completed full vendor due diligence and negotiated a multi-year contract with a next generation anti-virus / malware vendor.
- Identified, completed full vendor due diligence and negotiated a contract for static code analysis to review all custom built code.
- Deployed vulnerability management program to monitor office/branch and cloud infrastructure.
- Created incident response policy and procedures.
- Identified, completed full vendor due diligence and negotiated a contract with an outsourced security operations center (SOC) vendor for 24x7 monitoring of all bank systems, including custom deployed applications.
- Provided entire team InfoSec news updates regarding security events and trends.
- Worked with the office construction team to design and test lay-out of office network cabling.
- Deployed all office IT infrastructure including Fortigate firewalls and switches, Aruba wireless, initial office workstations, office phones and cell phones.
- Worked with the development team to deploy initial AWS infrastructure for prototype application development.
- Trained initial ITOps, DevOps and SecOps teams on deployed systems including assisting in developing transition strategies by documenting management procedures to assist in the hand off of management responsibilities to each team.

November 2006 -   **Founder, Managing Partner, CTO, CISO, Architect** (Managed Services)
December 2016   **ZZ Servers, LLC**. (www.zzservers.com) (Office/Data-Center/Cloud/Compliance)
- Co-Manage Business Development & Marketing of collocation and managed services .
- Managed Penetration testing team for ZZ Servers internal / external network and application penetration testing as well as contracted penetration testing services for customers.
- Identified and hired technical teams.
- Managed 24x7x365 team of system and network engineers responsible for entire corporate infrastructure and security.
- Managed daily team meetings covering all operational activities.
- Co-Manage long term project and product planning.
- Managed ZZ Servers PCI Level 1 validation (4 years) which had 100% of all systems and applications included as "in-scope."
- Managed and coordinated the Level 1 validation of all Level 1 merchants and service provider customers for all managed services ZZ Service provided.
- Wrote internal PCI Standards and co-wrote system configuration standards.
- Technical Sales Architect responsible for answering technical sales questions and designing technical diagrams and documents necessary to successfully deploy new customers.
- Created and managed corporate network designs and diagrams.
- Source and manage ASV partner for ZZ Servers and customers.
- Designed, configured and deployed multi-region OpenStack cloud solution with full API & web interface and all stack components (Identity/Dashboard/Compute/Object Storage/Block Storage/Image service/Networking (VLAN/VXLAN/GRE Tunnel/Cloud)).
- Sourced, designed and managed multiple Internet Colocation data-centers.
- Designed and configured all core systems for multi-site secure / compliant / auditor ready data-center operations centers.
- Designed and configured segmented ZZ Servers and Customer networks with logical and physical segmentation between all logical functions with IDS and network forensic monitoring all segments.
- Designed and configured all remote management designs to allow for secure two-factor management workstation and IP phone from remote locations.
- Designed, deployed and managed all security & network services, including Global Service Load balancing DNS load balancers, switches, routers, load balancers, firewalls, NIDS & HIDS.
- Co-Designed and deployed multi-DMZ managed infrastructure for deploying and supporting mass managed and unmanaged collocated Internet applications.
- Co-Designed and deployed ZZ Servers private cloud system for Xen virtual hosts.

December 2004 -   **CEO and Lead Consultant** (Systems & Security Consulting)
July 2012   **DMZ Services, Inc**. (www.dmzs.com)
DMZ Services, Inc.
- Formalized all business processes and relationships.
- Responsible for all business operations and management.
- Designed, deployed and supervise team that monitors distributed network intrusion detection network to monitor for threats against on-site or collocated network infrastructures.
- Designed, deployed and supervised team distributed application security log monitoring for threats against on-site or collocated applications.
- Created OEM product for highly available network load balancer on inexpensive network devices, supervised and contributed to web application configuration tool and supervise team managing deployment and use of load balanced network infrastructure.
- Designed and configured asterisk pbx, including IVR functions that integrate into company back-end systems and provide customers and staff multiple telephone based tools.
- Design, Built out and maintenance of Internet colo including n+1 servers for all tiers (Firewall, Web, DB, Mail)
- Design and programming of new DMZS portal that includes web site, email and customer provisioning along with online tools for network and local vulnerability assessment tied into full zabbix monitored systems.
- Provided small business consulting services for IT design and deployment as well as security vulnerability and forensic services for incident response requests from the small business community

DMZ Services - DRG – PCI QSA/PA-QSA/QDSP/QPADSP, 2005-2012
   PCI Projects below include auditing security policies, network architectures, firewall and IDS implementations, systems services and protocols, configuration standards, patch management, encryption methods and key management controls, antivirus, application software development lifecycles, systems authentication and physical access controls, audit logging and monitoring, media storage controls, data retention and destruction, disaster recovery and business continuity, incident response plans, network vulnerability scanning and penetration testing.
   - Adteractive – Visa CISP/PCI-DSS/Policy Review - 2005, 2006, 2007, 2008, 2009
   - Card Commerce - Visa CISP/PCI-DSS - 2006
   - Casino Money - PA-DSS - 2008, 2009
   - Central Pacific Bank - ISO27001 - 2008
   - Chelsea & Scott – One Step Ahead - Visa CISP/PCI-DSS/Pentest - 2006, 2007, 2009
   - Circles - PCI-DSS - 2011
   - Commonwealth of Massachusetts - PCI-SAQ/Training - 2008
   - Global Cash Access ATM Kiosk – Visa CISP/Policy Review/PCI-DSS/Pentest - 2005, 2006, 2007, 2008, 2009
   - Health Quest - Wireless Assessment - 2010
   - I-Pass - GoRemote – Visa CISP/Policy Review - 2006
   - Infonox ATM/POS - PCI-DSS/PABP - 2007, 2008
   - Jumpware POS - PA-DSS - 2010
   - Kayak.com - PCI-DSS - 2011
   - MAAS Global - PCI-DSS - 2008
   - Marine Corps Community Service (MCCS) – PCI-DSS PCI Audit of MCCS in Okinawa, Iwakuni, Fuji, Japan and USMC HQ Quantico, VA - 2006, 2007, 2008, 2009
   - Massachusetts Dept of Revenue - Pentest - 2010
   - Metro-North Railroad (MNR) - PCI-DSS - 2008
   - National Payment Provider - PCI-DSS/Pentest - 2008, 2009
   - NRT ATM/Kiosk - PA-DSS - 2009
   - Parkingsoft POS Kiosk - PA-DSS - 2011
   - Payment Service Network - PCI-DSS - 2008
   - Rainmaker - ISO27002/Network Assessment - 2008
   - Retail Cloud - PA-DSS - 2010
   - RetailCloud POS Kiosk - PA-DSS - 2011
   - Shop.com – Visa CISP Readiness Review - 2006
   - Source Technology POS Kiosk - PA-DSS - 2010, 2011
   - Suregate - PCI-DSS - 2009
   - System Pay - PCI-DSS - 2009
   - The Outsource Group - Site Review - 2005
   - University of Massachusetts PA-DSS Review - 2009
   - Wells Fargo Bank – PCI-DSS/Debit Card PCI/Policy Review - 120 people, 6 applications across multiple states - 2006, 2007
   - Williams Sonoma – Network Pentest/Wardial/Wireless Assessment - 2005, 2006

DMZ Services - DRG – Virgin Mobile USA, 2005
   - Contract Chief Information Security Officer responsible for creating security policies, procedures and department within Virgin Mobile USA (VMU)
   - Worked with SOX and PCI teams to ensure policies and procedures within VMU were in place to ensure VMU compliance.
   - Identified and assisted in hiring security engineering team
   - Identified additional requirements necessary for compliance.
   - Worked with all technical teams to ensure firewalls, network devices and security with newly created security standards
   - Initiated design of corporate wireless reconfiguration with WPA and centralized certificates. Worked with network and server team to begin beta testing of new wireless configuration
   - Created list of all security needs to be passed on to permanent CISO when hired.

DMZ Services - Sapient Data Security – Blue Shield of California, 2005/2006
   - Performed HIPAA Risk Assessment of internal projects and external vendors.
   - Assisted in hiring a full time staff risk engineer.

- Developed database to store all risk assessment details and generate department reports and statistics.
- Developed new methods of creating risk reports by extending current tool functionality.

DMZ Services - Verisign – Siebel Systems, 2004
- Designed IDS / IPS / Vulnerability assessment tool for Siebel systems through a contract with Verisign Professional Services.

DMZ Services – JustGive.org, 2004-2016
- Migrated hosting to DMZS managed facilities.
- Provided 24x7x365 IT and Security support and services.
- Added clustering of web, application and database layers for Justgive to facilitate 2005 giving season which should top 15MM in total donations through Justgive and American Express partner

DMZ Services – AirInter.net
- Created & programmed wireless portal for NoCat gateway, including full user and administrator management of accounts.
- Created & programmed payment gateway for NoCat gateway including support for SurePay, Cybersource, PayPal & BofA payment gateway
- Created custom embedded linux image and system for deploying AirInter.net/NoCat gateway on an easy to use small embedded system
- Worked with programmers and ISPs in multiple locations in the USA & throughout the world to deploy AI-NoCat gateway
- Recreated new AirInter.net web site for public download and forum support of all software released

April 2002 –   **Team Lead - Security, Architecture & Implementation**
December 2004   **Private Client Services Technology, Wells Fargo Bank, N.A.** (www.wellsfargo.com)
- Met with the Department management team on a regular basis to update status of team projects and initiatives.
- Worked with the Security & Architecture team to identify and resolve problems with projects or procedures within the PCS business.
- Met with the Architecture team on bi-weekly basis to review current projects and lead team discussions on issues and solutions to existing, new and planned projects.
- Established PCS Technology security infrastructure documentation templates and worked with the team to formalize the procedure of security & network documentation and peer-review of PCS projects.
- Created technical Site Review template and worked with team to establish procedure to perform and document site review and network.
- Performed security site review of multiple PCS acquisitions. Established site documentation and provided security designs to facilitate migration of acquisition legacy applications onto WFB network.
- Designed complex solutions to PCS network based applications to allow functionality of applications from Broker workstations to partner networks and the Internet.
- Responded to acquisition security incidents, rapidly designing and deploying multiple security solutions from IDS nodes to multiple Symantec VelociRaptor Firewalls.
- Designed and worked with the implementation team to deploy network & security infrastructure for PCS Correspondent services that included multiple web based co-branded applications built upon ASP/Weblogic & Custom code. All pieces were tied together through a single-sign-on solution.
- Identified and assisted in deployment of PCS Technology security document server utilizing Cyber Arc technology allowing for a secure file repository for all PCS technical and business documents.

November 1999 -   **CEO and Lead Consultant** (Systems & Security Consulting)
April 2002   **DMZ Services, Inc**. (www.dmzs.com)
DMZ Services, Inc.
- Established business relationships with engineers and consultants world wide to provide 24x7 support.
- Established capital budget and performed all back-office business functions, including permits, licenses, insurance and payroll.
- Designed and developed interface for performing all back-office tasks as well as providing an interface for all servers and services being monitored integrated into a system that clearly meshes with the business logic of the organization deploying it.
- Integrated new DMZS web design into several Open Source projects in the creation of the new

corporate web site using PHP, Perl and C. Included tools to support IT professionals with Project Management and distributed system and network assessment and system & security monitoring tools.
- Designed, programmed and managed live MP3/Vorbis-Jukebox, offering team custom set-lists they can choose from to listen to from home or work. The project became the backend to the radio station at the largest hacker convention in the world, Defcon.

DMZ Services - JustGive.org (**www.justgive.org**) (Non-Profit Volunteer IT & Security Support)
- Volunteered time and services to provide internet, server, network & security consulting to JustGive.org, Global Gateway to Charitable Giving and Philanthropy on the Internet.
- Setup Corporate Headquarters network, Linux Internet Gateway and Packet Filter Firewall.
- Deployed windows file shares with SAMBA, eventually moved to an NT file/print server.
- Designed 3 layer DMZ security architecture facilitates new software & partnership with American Express.
- Deployed & Supported new DMZ utilizing TRex firewalls, tripwire, snort, portsentry and sentryWatch to provide security and Apache Jakarta Tomcat with mysql and PostgreSQL database for the new application.

DMZ Services - Wells Fargo Bank, N.A. (www.wellsfargo.com) (Security Consulting / Firewall)
- Provided secure network infrastructure designs for the Secure Access Engineering Division of Wells Fargo.
- Worked with all banking business units within the bank to implement secure infrastructure designs on any project that connected to the Internet or external partner.
- Worked on designs for Wells Fargo Brokerage backend connectivity to multiple systems of record and partner networks.
- Designed, deployed and managed multi-zone firewalls for one of the first WFB co-branded sites.

DMZ Services - Sure-T, LLC (**www.sure-t.com**) - Founder / IT & Security (Online Sure-T Bonds)
- Founder with Sure-T, an electronic provider of Surety bonds for Internet Commerce to provide all IT & Security services.
- Worked with the creator to develop application design integrating security principles into the plan.
- Managed outsourced development shop on the build of the application, managing development cycle and reporting status to Sure-T founding team.
- Negotiated collocation facilities with Above.net for production servers.
- Procured all software necessary for Sure-T application, including lifetime Oracle license for core database.
- Worked with & managed a team of engineers to deploy secure infrastructure capable of being integrated into any leading financial, insurance or commerce application.
- Deployed multiple Raptor firewalls, SecureID access to every server
- Configured dual Sun Enterprise 4500's with shared SCSI D1000 RAID cabinet.
- Worked with network & server team to deploy application and server monitoring for developed J2EE/Weblogic application.
- Provided proactive support on 24x7 managed services for all servers and security.
- Provided complete documentation regarding IT management and IT deployment details to Sure-T team.

DMZ Services - Gazoontite.com (**www.gazoontite.com**) - IT & Security Consulting (Health Retail)
- Provided Gazoontite.com, an Allergy Solution provider with stores in NY, LA, San Francisco, Chicago and Online with UNIX (Solaris/Linux) & Security Consultant Support.
- Designed, configured & Deployed Development, QA and Production server farms.
- Assisted DBA and Developers in troubleshooting Oracle and java problems on large multi-processor redundant systems.
- Configured cron and other scripts to simplify repetitive applications. Installed custom bigbrother and MRTG monitors and provided documentation on all system(s) configuration.
- Performed custom sendmail rule configuration to provide inbound Internet proxy/gateway for email.
- Monitored and supported all systems in case of emergency.

April 1999 –   **Director of Information Technology** (Software Developer - TurboCAD)
November 1999   **International Microcomputer Software, Inc.** (www.imsisoft.com)
- Managed International IT Department that provided and supported the systems and networks used by the corporate office and their Internet strategies.
- Organized all IT projects in an online project system, including support for online meetings.
- Provided weekly reports to executive staff on all IT department projects.
- Organized weekly and monthly budget and expenses. Worked with the financial department to develop a capital budget.
- Documented infrastructure with dig-down & database integrated Visio Diagrams.
- Outlined security policies through drafts of Internal Computer Use Policy and Security Standards.
- Redesigned headquarters LAN installing corporate VPN and firewall.
- Investigated and specified future co-location partners.
- Negotiated with regional and international ISPs, Telco and Equipment vendors.
- Moved executive staff onto blackberry wireless services.
- Installed 24x7 network monitoring system monitoring for: Bandwidth, Server status (services and internal processes and drive space), and inappropriate system/network activity.
- Configured UNIX (Sun Enterprise & Linux) systems for use with: Oracle, MySQL, Apache-SSL, PHP, Mod-Perl, FastCGI and Coldfusion.

April 1998-   **Security Consultant** (Internal Employee)
April 1999   **Wells Fargo Bank, N.A.**; Information Security Services (www.wellsfargo.com)
- Provided security consulting services on complex projects.
- Ensured security risks such as data access, integrity, confidentiality and business continuity controls were identified and addressed.
- Guided internal customers in their project security planning process and risk/exposure analysis.
- Developed and evaluated platform specific security standards.

August 1997 -   **Founder/CEO/CISO/Developer** (Regional Wireless ISP)
April 1998   **Air Internet, LLC** (www.airinter.net)
- Founded High Speed Wireless Internet & Services Provider for the Charleston, SC regional area.
- Designed all marketing and rollout of the network.
- Negotiated access to the entire BellSouth & Sprint Towers in the SouthEastern US.
- Negotiated data connectivity from a regional internet provider.
- Investigated possible insecurities and concerns with wireless networks.
- Identified WIMAN equipment for wireless, and negotiated exclusive rights to equipment in the Carolinas.
- Designed city grid & setup first antennas on 175' tower.
- Setup and configured SOHO Router, a modified Linux Router Project ([LRP](LRP)) to support WIMAN equipment..
- Provided 24/7 online radio station broadcasting live & recorded DJs via real-audio & video.

August 1995 -   **CEO and Lead Consultant** (Systems & Security Consulting)
April 1998   **DMZ Services** (www.dmzs.com)
DMZ Services
- Responsible for all aspects of running a business to include developing the software, marketing and sales.
- Provided security reviews of new and existing infrastructures and provided solutions to issues discovered.
- Assessed infrastructures for capacity planning and provided designs and equipment necessary to handle current and future utilization.
- Designed and Installed Novell/UNIX/NT networks.
- WEB page design (HTML, CGI, Java, JavaScript), maintenance and hosting.
- Developed TeleResort Auctions - an automated auctioning system for property bidding via touch tone telephone, included development of libraries for: RS232 interrupt driven routines for IBM-PCs, Graphics Kernel System in C++ & Text Window System.

DMZ Services - Cable Wave, Inc., (www.cablewave.net) (Linux & Security Consulting)
- Assisted system manager with configuration and support of custom Linux/Cable modem interface.
- Provided support for wireless Internet connection from Air Internet.

- Assisted system manager with security design issues and network penetration testing.

DMZ Services - Internet Channel, Inc. (Internet News Manager & Linux Consulting)
- Setup and maintained Internet news feed from news servers around the Internet to their customers.
- Provided support to internal staff with Linux kernel & network questions.

January 1994 –   **Founder/Board Member/IT/Security/Programming** (Regional ISP)
July 1994   **A World of Difference, Inc.** (www.awod.com)
- Setup for A World of Difference, the first Internet provider for the Charleston County area.
- Facilitated negotiations for Internet services from regional Internet provider
- Established relationship with equipment vendors to acquire hardware for initial operations.
- Programmed customer interface menu, setup all services used by customers.
- Configured routers and dialup equipment.

July 1991-   **MIS Manager** (Shipping Freight Forwarding, Intermodal, Warehouse)
August 1995   **Atlantic Services Group, Inc:** Palmetto Shipping, TradeSource, Opti-Trans Inc, Commercial Bonded Warehouse, Prestige Furniture, Atlantic Document Storage
- Maintained all IT projects and provided reports to management at weekly staff meetings.
- Maintained IT budget and allocation of all monthly expenses.
- Documented entire network design and layout.
- Monitored & supported systems and network to assure resource availability.
- Implemented trouble ticket system for IT issues.
- Downsized from AS400 & VMS to Novell/UNIX network.
- Implemented wireless barcoding system and integration with warehouse management software.
- Designed & Programmed barcode and EDI printing application.
- Established relationship necessary to facilitate EDI transfers with business partners.
- Programmed EDI interpreter that would pull data from several locations and output EDI documents that would be transmitted to business partners through EDI gateway network & Internet.
- Setup scripts to gather information from several hosts (AS400, MicroVAX & Novell) and integrate into EDI transfer with business partners.
- Implemented secure remote-access server for Novell & UNIX.
- Developed several utilities used in maintaining system performance on VAX hardware and monthly backup of Logicraft 386Ware Server.
- Worked with program developer to solve problems and produce needed reports on Xenix machine.

August 1988   **Computer Operator III / Computer Lab Operator**
July 1991   **College of Charleston** (www.cofc.edu)

August 1990   **Software Engineer** (Designer, Programmer, Documentation)
May 1991   **Medical University of South Carolina** (www.musc.edu)

Summer 1990   **Programmer** (College Statistics Learning Programs)
                        Quant Systems (www.quantsystems.com)

August 1989 -   **System Operator** (Public Access BBS)
March 1994   **The Thieves Market, WWIVnet/FidoNet**

April 1986   **Computer Consultant**
                        Kay's Marine Service & Supply

January 1985 –   **Computer Consultant**
February 1988   **Atlantic Boat Chandlers**

Affiliations

Security BSides - San Francisco (Volunteer) / Las Vegas (Volunteer) / Charleston, SC (Co-Founder / Board Member / Organizer / Fund Raiser / Coordinator).

Midnight Research Labs – Technology & Security research group

Tri Valley Security Group – SF East Bay Security group

Interzone West / SecurityOpus – San Francisco Bay Area Security Conference.

Bay Area Linux Users Group – Archived some presentations (including Linus Torvalds)

Alpha Phi Omega - National Service Fraternity

Florence Crittenton Home for Unwed Mothers – IT Volunteer 1993

Association of Computing Machinery - College of Charleston: Vice-President 1990-91, National member 1991

Peer Mentor: Student volunteer organization that would assist the College of Charleston Orientation office during orientation and help new students around campus

Civil Air Patrol: 1984 – 1990: Participated in Search and Rescue Missions and Training. Received computer training at the Air Force Computer Orientation Program (AFCOP) and flight training

Education

College of Charleston, Charleston, SC: Studied Computer Science, Math, Physics, Philosophy and Japanese

SANS GIAC Certified Forensic Analyst (GCFA): Training in December 2002, Cert incomplete, GCFA Practical

Blackhat Security Training & Briefing USA: 2000 – 2005, 2016-

Defcon: 1998 – 2006, 2010 - 2019, 2022

BSides Las Vegas: 2010 – 2019, 2022

BSides SFO: 2011 - 2012

BSides Charleston: 2012 - 2019, 2022

ShmooCon: 2012 - 2014

References

Available upon request