VITA

FREDERICK W. SCHOLL, PH.D.

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SUMMARY

Senior global academician, executive and risk manager with multiple industry career tracks in education, information technology services, information technology manufacturing and automobile manufacturing. Currently leading university-level online Cybersecurity master's program including curriculum development, course development, teaching, student recruitment, mentoring, career placement, business collaboration and consulting. Industry expertise includes enterprise IS management systems, security strategy and program development, security policy development and updating, IS security best practices, security and control frameworks, risk management and IS talent recruitment and mentoring. Areas of accomplishment include compliance remediation strategies, information security process development and ISO security management standards; and possess expertise in HIPAA, Sarbanes-Oxley, JSOX, ISO, NIST, PCI, COBIT and ITIL compliance.

CAREER HIGHLIGHTS

- MS Cybersecurity Program Founder and Director at Quinnipiac University (QU)
 - o Grew program to profitability in two years
 - o Grew enrollment by 10x over period from 2018-present
 - o Planned and carried out NSA/DHS CAE CD PoS submission
 - o CAE Program Validated 10/2022
 - o CAE-CD Designation granted July, 2023
 - o Developed new courses on Cybersecurity in Healthcare and Cybersecurity in FinTech
- Developed 30 new online courses at OU covering all aspects of contemporary cyber defense.
- Developed novel cybersecurity build-in defense method for CMS XLC development process
- Evaluated security policies for 27 hospitals within the NIH All of Us research program; work done for Vanderbilt Medical Center (VUMC)
- Developed interactive threat models for All of Us data storage at VUMC
- Founding faculty member of Lipscomb University's on ground MS Security program
- Developed six new master's courses on information security management at Lipscomb University
- Led IS programs, security product and service evaluations and adoptions, security business case analysis, remote data access policy development, intrusion detections, anomalous events and remediation, threat vulnerability management, corporate security initiative identification, and Hacking Team and CIRT Team relationships and management.
- Developed specialization in information security risk analysis, best practice remediation plans, information security risk identification and analysis, and business case development to win executive support.
- Established new IS security team and JSOX compliance programs for Nissan Americas and managed 20 high-caliber professionals and \$7 million budget.
- Developed strategies to turnaround underfunded and dysfunctional security initiatives and delivered highly robust security programs that circumvented risk exposure.
- Implemented security compliance programs from audit requirements to compliance.
- Testified in state and federal courts as technical expert in lawsuits concerning Internet communications systems.
- Enabled global businesses to receive substantial returns on information security program investments; drove higher IT asset protection, avoided substantial financial losses, and sustained global brand integrity.

- Conducted business globally; locations include France, Germany, England, Italy, Japan, Taiwan and Korea.
- Facilitated presentations on information security, privacy, data forensics, application performance, and data communications.
- Co-founded pioneering fiber optic data communications firm; collaborated in IPO; and served on Board for 11 years.

ACADEMIC CAREER EXPERIENCE

QUINNIPIAC UNIVERSITY, Hamden, CT

August 2018-present

Private, nationally ranked university; it has 10,200 undergrad and graduate students

Cyber Security Program Director and Associate Teaching Professor of Cyber Security

Started the online MS Cybersecurity program in August 2018. Accomplishments:

- Grew program by 400% in 18 months
- Built profitable program in 30 months
- Actively worked to promote program through social and conventional media
- Created original 30 credit hour curriculum, emphasizing alignment with NSA CAE requirements and needs of industry
- Started undergrad 4+1 and 3+1 programs
- Set up diverse advisory board of CISO's and business people
- Created OKR's to track program quality
- Hired and trained 11 new faculty
- Created and taught courses, including Introduction to Cybersecurity, Threats, Defenses, Policy, Cloud Computing and Cryptography
- Obtained \$25,000 software donation from Axis Security
- Received \$70,000 TTA workforce development grant from BHEF/NEBHE
- Collaborated with 8 healthcare organizations to develop focused online course on Cybersecurity in Healthcare (2022-2024)
- Collaborated with 7 fintech organizations to develop focused online course on Cybersecurity in FinTech (2022-2024)

Faculty Fellow, People's United Center for Innovation and Entrepreneurship June 2021-2022

VANDERBILT UNIVERSITY, Nashville, TN

August, 2015-2016

Private, nationally ranked university; it has 11,800+ undergrad and graduate students.

Adjunct Professor of Electrical Engineering and Computer Science

LIPSCOMB UNIVERSITY, Nashville, TN

2012-June 2015

Private, co-educational liberal arts university; it has 4,500+ undergraduate and graduate students.

Associate Professor and Interim Director of Graduate Programs, School of Computing and Informatics

Hired as visiting professor to teach information security graduate-level courses, connect school to business community and advise students concerning capstone research projects. Transitioned to permanent position to build out graduate-level information security programs, upgrade curriculum, recruit students, lead industry consulting and outreach programs and establish Lipscomb as consulting resource and source of potential employees in Nashville area.

- Developed and have taught five information security courses, improving Lipscomb brand for IS education in Nashville area. Courses taught in past 18 months include: ISEC 5173: Legal, Ethical and Compliance Concerns, ISEC 5163: Secure IT Communications & Operations, ISEC 5223: Business Continuity and Disaster Recovery, ISEC 5123: Risk Assessment & Mitigation Planning, ISEC 6113: Capstone Project and MITM 5173: IT Law and Policy
- Taught above courses in MS Information Security, MS Technology Management and MS Information Analytics Programs.
- Designed and developed curriculum for new MS Information Technology (MSIT) Program, now being rolled out. Program includes six courses and concentrations in Information Security, Data Science, Technology Management and Software Engineering.
- Enabled 100% of students (120) to gain permanent information security employment or internships; created student recruit pipeline from diverse undergraduate backgrounds and marketed past student success.
- Established relationships between College of Computing and Technology and business and government entities; collaborated to recruit business leaders for CCT Advisory Board.
- Recruited new students on ongoing basis; mentor them to achieve timely program completion and assist them with career placement.
- Launched business consulting program using team of professors and students; increased university brand awareness in business community, resulting in new collaborative ventures, revenue and source of students.

CONSULTING AND BUSINESS CAREER

Monarch Information Networks, LLC, Madison, CT

1991 to Present

Entrepreneurial consulting business; provides diverse technology services including security consulting, network reliability and security evaluations, strategic/tactical application performance reviews, LAN/WAN architecture and litigation services (technology/application assessments and expert witness services). Client list includes: Merrill Lynch, Dow Jones, JP Morgan Chase, McGraw-Hill, United Technologies, Salomon Smith Barney, AXA/Equitable, Healthways and other global businesses.

Founder and Principal

Empower clients to operate their businesses more effectively and with confidence.

- Developed new methodology for securing cloud native applications, under contract with Center for Medicare and Medicaid
- Evaluated hospital security policies for alignment with NIH requirements under "All of Us" program. Contracted with Vanderbilt Medical.
- Enabled \$1 billion family investment fund to validate decision concerning potential investment in new information security venture; performed due diligence, evaluated intellectual property (IP), researched patents and previous/related art and documented uniqueness/litigation defensibility of new product.
- Ensured that prominent international NYC foundation would not jeopardize its confidential grants database and private data, by performing security analysis of online payments requisition application and identifying 17 major changes to improve protection of major database.
- Enabled 150-year-old law firm to win contract with major financial services client; performed risk assessment, developed security strategy and provided RFP guidance.
- Created strategy, processes, procedures and technical specifications that enabled \$1 billion healthcare client implement new application to increase market competitiveness and achieve HIPAA and ISO 27001 compliance.

- Remediated enterprise security program for mid-tier automobile insurer enabling it to achieve PCI
 and audit compliance; assessed security gaps/risks, developed strategy, built business case and
 launched program.
- Enabled 600 employee retail financial services client to achieve PCI compliance and reduce risk from high employee turnover; documented and changed workflows to on/off-boarding processes to make them more auditable and secure, while reducing costs and redundancies.
- Delivered expert witness testimony in diverse cases concerning patents and IP. Representative cases include:
 - o Global Online Retailer: Enabled defense against patent infringement.
 - Major Advertising Network: Enabled invalidation of patent claim concerning "cookies" technology, achieved settlement and avoided expensive trial.
 - o Regional Southeastern Bank: Enabled bank to defend right to use check imaging technology, achieve settlement and avoid potential trial loss.
 - Major Television Cable Business: Avoided high-risk, high-loss potential litigation; enabled settlement.
 - o Global Fortune 100 Technology Business: Enabled client to win settlement and new contract, by documenting unauthorized use of network resources by its client.
- Established 100% compliance with Japanese federal regulations for Fortune 100 manufacturer; championed and led JSOX remediation program.
- Eliminated legal exposure/liability for major cable ISP business; analyzed Internet backbone performance and documented all performance failures, enabling client to terminate \$100 million contract with Internet provider.
- Recovered \$80 million in unauthorized use of major outsource vendor network by client's employees; collaborated with vendor to secure new contract and payment for documented usage.

Nissan Americas, Nashville, TN

2006 to 2008

US division of world's sixth largest auto maker; it makes and sells Nissan and Infiniti automobile brands.

Senior Manager, IS Security and Control

Hired to inaugurate and institutionalize information security within Nissan Americas and support Nissan global security initiatives; directed IT security and compliance team that protected IT assets including 19,000+ PCs and supported \$30+ billion in revenue. Focused on IS audit compliance (JSOX), regional IS policies, IS program management, vendor outsourcing, automated security control acquisition/implementation, management dashboard development and end-user training programs.

- Enabled business to meet security needs when using outsourced vendors by championing enterprise-wide security event monitoring technology initiative, providing more robust security controls.
- Spearheaded new security awareness program, using e-learning solution to train 4,000 employees; solution was developed by NNA and later adopted by Nissan Europe, Nissan Mexico and Japanese organizations.
- Spearheaded regional security policy architecture. Consolidated four local security policies to single policy. Collaborated with Japan counterparts to develop Global Information Security Policy.
- Accelerated new business application security improvements and reduced rework costs for security controls by architecting application security development practice that was integrated into Nissan SDLC.
- Influenced external outsourced vendor to more than double security staff with no additional cost to Nissan.

Codenoll Technology Corporation, Yonkers, NY

1980 to 1991

Fiber optic networking business that maintains Ethernet passive LANs; it is now subsidiary of TE Connectivity, Ltd. It was ranked as an *Inc. 100* company.

Senior Vice President/Board Member/Co-Founder

Member of senior management team collaborated to take business from startup to mature.

- Generated \$12 million global revenue by inventing/patenting fiber optic data communications products.
- Founded and grew engineering and manufacturing departments to 75 resources.
- Enabled advances in diverse consumer/business products by developing first high-speed plastic fiber optic network, now integrated into automotive, industrial, consumer and medical applications.
- Raised \$5 million to support IPO, in collaboration with other key executives.

EDUCATION AND CERTIFICATIONS

EDUCATION

Cornell University, BS Electrical Engineering
Cornell University, PhD Electrical Engineering

CERTIFICATIONS

CCISO
CRISC
ITIL Foundations
NACD Cyber Certificate
Azure Fundamentals Certificate
ISC2 CCSP

CISSP
CHP (Certified HIPAA Professional)
iSAFE (Internet Safety)
ISACA CSX
ISACA CISM
PCIP (2016-2019)

LEADERSHIP ROLES, PROFESSIONAL AFFILIATIONS AND HONORS

Member, The Advisory Council (www.tacadvisory.com) (2004 to Present) Chairman, IEEE 802.3 Fiber Optic Working Group Standards Committee (1987 to 1991)

Tau Beta Pi Phi Kappa Phi

Outstanding Young Men of America, 1980 Who's Who in Frontiers of Science and Technology, 1985

Who's Who in the World, 1987

Who's Who in the Americas, 2020

International Who's Who in Optical Science and Engineering, 1985
Institute of Electrical and Electronics Engineers, Life Member
Information Systems Security Association, Senior Member
American Bar Association Information Security Committee
Member, ISACA

1969

1976

VOLUNTEER WORK

Advisory Board Member, Pace University for Advanced Media, (2001-2006)
Technology Advisory Committee, Rye City School District, (2004-2006)
Community Outreach Director, Middle Tennessee ISSA Chapter (2009)
Founder and Chairman, Nashville Chapter, Society for Information Management, (2009 to 2016)
Member, Nashville Rotary, (2017-2018)
Member, New Haven Rotary (2019-present)
Mentor, Vanderbilt Wond'ry
Member, New Haven Technology Council (2020-2023)

PRESENTATIONS AND PUBLICATIONS

- "Unveiling Cyber Threats: A Comprehensive Analysis of Connecticut Data Breaches", ASEE NE Section, April 19, 2024.
- "AI & Cybersecurity", Panel Presentation, NY Metro Joint Security Conference, September 26, 2024
- "Expanding Tech Credentialing Opportunities", Panel Discussion, Tech Talent Ecosystem Summit, September 19, 2024
- "Managing Business Risk Using Vulnerability Scanning", Diane Reilly and Frederick Scholl, NY State Cybersecurity Conference, June 8, 2022.
- "Standardize and Automate Security Compliance in Public Sector Agencies", with Sameer Kamani, ISSA Webinar, April 21, 2021
- "Cybercrime—A Proposed Solution", Purdue CERIAS Seminar, April 2, 2021.
- "Cybercrime—A Proposed Solution", NEACS Conference, October, 2020.
- "Threat Modeling: Removing the Mystery", InfoSec Nashville, September 2018.
- "How HR Can Become a Cybersecurity Ninja", http://hrexecutive.com, February 4, 2019.
- "Reimaging Information Security", ISSA Journal, May 2015.
- "How to Protect Your Company's Valuable Trade Secrets", ISSA International Conference, October 2014.
- "The Weakest Link: Why and How We Must Embed Security Controls into Business Processes Now", ABA Information Security and Privacy News, Summer, 2014
- "Cybersecurity Protects Your Company's Valuable Trade Secrets", ISSA Journal, March 2014.
- "Understanding the Presence of Experiential Learning Opportunity Programs in the Information Security Field", Information Security Curriculum Development Conference, Kennesaw State University, October 2013.
- "Strengthening the Local IT Sector through Academic-Industry-Government Collaborative Partnerships", INFORMS, Annual Conference, Minneapolis, MN, October 2013.
- "Business-IT Partnerships Needed to Protect Digital Data", ISSA Journal, October 2013.
- "Show Me the Money: How to Cost Justify Information Security Projects", PMI Symposium, Nashville, TN, April 30, 2013
- "Three Myths of Information Security", AITP Meeting, Nashville, TN, September 13, 2012
- "Achieving Operational Excellence in Security", RSA 2012, San Francisco, CA, March 1, 2012
- "Managing Risks in Cloud Computing", Bethel University, Nashville, TN, January 21, 2012
- "Information Security for Law Firms and Their Clients", Tennessee IP Law Association, CLE Program, November 11, 2011
- "A Lean Approach to Information Security", ISSA Journal, May 2011
- "How to Stay Secure...and in Compliance", ISSA CISO Forum, Minneapolis, MN, May 2011

- "Proactive Incident Response", ISSA Journal, February 2011
- American Bar Association Handbook of Privacy and Security, contributing author, February 2011
- "Andy Was Right; Information Security 2010-2020", ISSA Journal, December 2010
- "Why Security Controls Don't Work...And What to Do About It", ABA Information Security & Privacy Newsletter, Fall, 2010
- "Essential Security Practices for Healthcare Businesses", TNAAP Practice Managers Conference, June 11, 2010
- "How to Prepare for HIPAA Security & Privacy Enforcement", Health Camp Nashville, May 30, 2009
- "In Security, Constant Monitoring Counts", CRN, October 18, 2004
- "Network Security and Forensics", Urban Security Certificate Course, Polytechnic University, October 18, 2003
- "Data Privacy and Security: Understanding and Meeting Today's Business Requirements", Short Course with Professor Roy Girasa, Esq. at Polytechnic University, May 23, 2003
- "The Changing Privacy and Security Landscape", Business Communications Review, May 2003
- "Marketing Your Small Business", Pace University Seminar, February 2003
- "Network Forensics", IEEE Communications Society Seminar, November 14, 2002
- "Network Forensics", Presentation to InfraGard, New York City, September 2002
- "Performance Strategies", Network Magazine, November 1997
- "Intranet/Extranet Performance and Security in the Financial Markets", Waters Information Services Seminar, Fall, 1997

MEDIA APPEARANCES (2020-2022)

- Twitter hack here: https://www.nbcconnecticut.com/news/local/hackers-target-twitter-accounts/2303027/
- NBC video: https://app.criticalmention.com/app/#/clip/public/66b5027e-d0d4-4c70-85c7-2d8481b106cb
- Fox 61: https://app.criticalmention.com/app/#/clip/public/5f01e745-cdd4-412e-bdde-f72812ce7932
- 9/21/2020: Lisa Wexler show interview WICC
- 11/29/2021: https://www.nbcconnecticut.com/news/local/quinnipiac-cyber-security-expert-offers-cyber-monday-safety-tips/2661723/
- 2/2/2022: https://www.wtnh.com/news/connecticut/new-haven/waterbury-man-accused-of-using-apple-airtag-to-track-victims-car/
- 3/22/2022: https://www.wfsb.com/2022/03/22/officials-warn-potential-cyberattacks/
- 3/22/2022: https://www.qu.edu/quinnipiac-today/staying-secure-in-cyberspace-2022-03-22/
- 4/28/2022: https://app.criticalmention.com/app/#/clip/public/8f232f78-decf-4822-8ed2-ddc4efe0032a
- 5/26/2022: https://www.nbcconnecticut.com/news/local/hamden-it-systems-have-been-compromised-mayor/2794526/
- 7/1/2022: https://www.huffpost.com/entry/should-you-click-allow-cookies-website I 62be36b4e4b014f50a2fdd61?vue

MEDIA APPEARANCES (2022-PRESENT)

5/3/2023: Melissa in the Morning Interview
 3/13/2024: WICC interview with Paul Pacelli

10/3/2024: NBC CT
 11/27/2023: WCBS-AM
 11/10/2023: NBC CT

• 8/4/2023: Multiple media outlets, including News 8, Channel 3, NBC CT and WICC-AM

ONLINE PUBLISHED "CYBERSECURITY CAREER INTELLIGENCE" CONTENT

Content Type	Date	Title
	8/12/2021	Cybersecurity Career Intelligence An Interview with
Video		Chuck Saia
	3/16/2021	Cybersecurity Career Intelligence Exploring
Video		Cryptography with Jean Philippe Aumasson
	10/28/2020	Cybersecurity Career Intelligence An Interview with
Video		Gary Kessler on Maritime Cybersecurity
	5/30/2019	Cybersecurity Interview Series Marci McCarthy
Video		(short)
Video	5/30/2019	Cybersecurity Interview Series Marci McCarthy
Video	6/20/2019	Cybersecurity Interview Series Rosemary FitzGerald
Video	5/28/2019	Cybersecurity Interview Series John Bau
Video	5/13/2019	Cybersecurity Interview Series Brian Kelly
Video	4/15/2019	Cybersecurity Interview Series Jason Black
Video	10/5/2020	Cybersecurity Career Intelligence Mark Burnette
Video	9/30/2020	Cybersecurity Career Intelligence Jessica Barker
Video	8/27/2020	Cybersecurity Career Intelligence Sami Saydjari
	8/18/2020	Cybersecurity Career Intelligence Christopher
Video		<u>Henderson</u>
Video	8/18/2020	International Security Perspectives Haren Shah
Video	7/17/2020	Cybersecurity Career Intelligence Heather Bearfield
Video	7/17/2020	Cybersecurity Career Intelligence Jeff Brown
	5/4/2020	Cybersecurity Career Intelligence Michael Wiebe
Video		Interview
	5/19/2020	Cybersecurity Career Intelligence Richard Stiennon
Video		Interview
Video	3/10/2020	Cybersecurity Career Intelligence Rafal Los Interview
	5/13/2019	Cybersecurity Career Intelligence Frank Kovacs
Video		<u>Interview</u>
	10/10/2019	Cybersecurity Career Intelligence Roger Grimes
Video		Interview

	10/10/2019	Cybersecurity Career Intelligence Michael
Video		Santarcangelo Interview
	10/11/2019	Cybersecurity Career Intelligence John Coursen
Video		Interview
	10/15/2019	Cybersecurity Career Intelligence Deidre Diamond
Video		Interview
	4/20/2020	Cybersecurity Career Intelligence Dr. Chase
Video		Cunningham Interview
	5/19/2021	Reviewing President Biden's cybersecurity executive
Article		order
Article	11/6/2018	The path to improving cybersecurity culture
Article	8/21/2019	How to become a cybersecurity RSO
Article	6/3/2020	So, you want to join the dark side of cybersecurity?
Article	10/1/2019	31 tips for National Cybersecurity Awareness Month
Article	3/22/2022	Staying secure in cyberspace
Article	7/29/2020	MS in Cybersecurity creates opportunities for graduate
7 ti ciole	1/29/2020	Developing your portfolio of soft skills for
Article	, -,	cybersecurity
	5/17/2019	Mining the 2019 Verizon data breach report for
Article		cybersecurity career guidance
Article	2/22/2019	Cybersecurity career strategies: what not to do
7	3/1/2020	Protecting you and your small business against
Article	, ,	ransomware
	4/30/2019	Security practitioners must keep up with changing
Article		roles
	3/24/2019	Protecting your small business from cyber scams this
Article		<u>tax season</u>
Article	10/7/2020	How to avoid being scammed by fake web pages
Article	3/15/2020	3 tips for choosing a graduate degree program
Article	1/7/2021	Leaping from pre-med to cybersecurity
	5/8/2021	Washington moves to address shortage of
Article		cybersecurity workers
Article	10/7/2020	My journey into the world of internet fakes
	5/2/2018	Mitigating organizational risk through workforce
Article		<u>development</u>
	11/23/2020	Keep the stuffing for your Thanksgiving dinner: Staying
Article		safe this Cyber Monday
Article	10/22/2020	Early influences shaped cybersecurity professional
Article	3/18/2021	Identifying cybersecurity career trends
	5/10/2020	Cultivating communication skills for security
Article		professionals: Part I
	1/27/2020	CISSP vs Master's: How to advance your cybersecurity
Article		career

11/5/2020

<u>Choosing the best cybersecurity master's degree</u> <u>program</u>

Article