

# JENNIFER L. BAYUK

[jennifer@bayuk.com](mailto:jennifer@bayuk.com)

973-335-3530 (o)

646-261-7684 (m)

**PROFILE** A technology risk management thought leader and cyber security subject matter expert. Experienced in information technology governance, BASEL operational risk management principles, system security architecture, cyber security tools and techniques, cybersecurity forensics, audit of information systems and networks, and business continuity processes. Skilled in cybersecurity risk and performance indicators, technology risk awareness education, risk management training curriculum, and system security research. Masters degrees in Philosophy and Computer Science. Ph.D. in Systems Engineering. Certified in Information Systems Audit, Information Systems Security, Information Security Management, and IT Governance (CISA, CISSP, CISM, CGEIT). NJ Licensed Private Investigator.

## EXPERIENCE

### **Independent Technology Risk Management Consultant**, New Jersey, 6/08 to present

Engaged in a wide variety of projects ranging from security policy and metrics for financial institutions to research in systems security engineering for government contractors. Perform cyber security risk and regulatory compliance assessments. Develop systems security architecture. Develop and teach courses in various aspects of cyber security for academic institutions and industry associations. Lecture at conferences. Participate in public and private security-related committees. Assist entrepreneurs on Cybersecurity Architecture, Technology Risk Management, and secure Cloud and Mobile requirements. Provide expert witness and legal consulting services. Exemplar projects:

#### **ISACA NJ Chapter**, 3/09-present.

Develop and teach courses on emerging topics in cybersecurity and technology risk and controls.

#### **G. A. Baird Partners & Co**, Stamford, CT, 6/17-11/17.

Created Cybersecurity and Technology Risk programs for a *denovo* Bank. Specified systems security architecture for Digital Banking Architecture and Third Party Integration, focusing on Cloud and Mobile Security Technologies.

#### **Stevens Institute of Technology**, Hoboken, NJ, 9/09 to 06/12.

Created a new graduate curriculum in cyber security for the School of Systems and Enterprises, including complete content for four new courses in systems security architecture and engineering. Led three research projects in systems security engineering, including a research roadmap for the Department of Defense Systems Engineering Directorate. Created a systems security engineering laboratory. Taught graduate courses in enterprise security architecture and information security management for the School of Technology Management.

#### **Delta Risk**, Chicago, IL, 7/09-1/13.

Provided business requirements, testing, and analysis for Securities Industry and Financial Markets Association (SIFMA) Quantum Dawn Cybersecurity Exercises. Assisted in the development of DECIDE simulation environment for experiencing cyber attack scenarios, and the scenarios used by SIFMA.

### **Managing Director, Cybersecurity Governance, Risk & Control, JPMorgan Chase**, NY, NY, 10/16 to 6/17.

Designed, managed, and measured a Cybersecurity Risk Management framework in support of \$600M Firmwide Cybersecurity Program. Managed the evolution of cybersecurity and technology risk policies and standards in coordination with cybersecurity product managers and the broader Technology Control organization. Globally coordinated cybersecurity regulatory, audit, client, and partner engagement in coordination with Technology Control and Cybersecurity Regional leads. Managed governance and control processes applicable to the Cybersecurity organization, including but not limited to self-assessment, resiliency and recovery, issue management, third party oversight, and inter-affiliate agreements.

### **Managing Director, Operational Risk Management, Citi**, New York, NY, 3/13 to 10/16.

Coordinated activities within first and second lines of defense to identify, measure, monitor, and manage key operational risks within Citi's Enterprise Operations and Technology (O&T) division in accordance with firmwide Policies and Procedures (~60 distinct Global and Regional operational entities). Proactively engaged individuals at all levels of management to understand and assess both inherent and residual risk due to business dependency on technology and centralized operations such as Human Resources and Financial Services. Participated in risk-related forums, including the Information Security Committee and Fraud Oversight Committee. Advised multiple levels of executives on a wide variety of topics related to global risk management program strategy and execution. Escalate and track issues. Devised and directed the development of Technology Oversight Procedures and Technology Metrics used firmwide for Management Control Assessment and Operational Risk Analysis.

**Senior Managing Director, CISO**, Bear Stearns & Co., Inc., Whippany, NJ, 4/98 to 6/08.

Designed and implemented firmwide processes to protect, detect, and recover from harm to information. Established and maintained enterprise-wide security, change control, and business continuity metrics. Chaired Information Protection Committee and participated in Global Outsourcing and Firmwide Emergency Response Committees. Drafted, negotiated, and issued security policies and processes. Devised tools, techniques, roles, responsibilities, and awareness materials for security processes, including digital identity, application inventory and information systems risk management. Provided technical requirements and test programs for security products and security features of new applications. Directed the activities of development and infrastructure officers with respect to security tools and techniques. Directed information security investigations and remediation activities in coordination with human resources, legal and compliance. Coordinated emergency response teams for cybersecurity events. Reviewed physical security efforts in support of data center protection. Contracted and managed penetration tests. Guided management through information technology (IT) audits. Performed due diligence in support of merger, acquisition, research analyst, and investment banking activity. Prepared materials on security measures for prospective clients. Coordinated industry efforts in support of firm goals for information security improvements. Directly managed department budget (~3M) and security tollgates over all projects in IT budget (~600M).

**Manager, Information Systems Business Controls**, AT&T Capital Corporation, Morristown, NJ, 2/97 to 4/98.

Led and executed the company's global internal audit and control assessments with respect to information systems. Conducted security investigations. Provided direction and guidance on systems control issues for the company's strategic leaders. Developed COSO & COBIT compliant systems audit approach.

**Information Systems Risk Manager**, Price Waterhouse LLP, Morristown, NJ, 1995 - 1997.

Managed a wide variety of security consulting and audit projects for the Price Waterhouse Information Systems Risk Management Practice, including penetration tests and infrastructure reviews. Developed methodology for evaluating the effectiveness of security management processes and trained both consultants and senior managers on its use.

**Information Security Technical Staff**, AT&T Bell Laboratories, Holmdel, NJ, 1990 - 1995.

Led diverse, cross-organizational teams focused on security and data integrity, including the AT&T Network Security Requirements Team, the Security Analysis of the Network Environment Team, and the Security Assessment Team. Developed expert system software. Performed computer security audits and corporate security investigations.

**EDUCATION**

**PhD Systems Engineering**, Stevens Institute of Technology, 2012, Thesis: Measuring Systems Security, GPA 3.9.

**MS Computer Science**, Stevens Institute of Technology, 1992, GPA 3.9.

**MA Philosophy**, The Ohio State University, 1986, GPA 3.5.

Thesis compared logic in expert systems to that of compiler design.

**BA Computer Science and Philosophy**, Rutgers College, Rutgers, the State University of New Jersey, 1985, GPA 3.59, Henry Rutgers Honors Scholar, Thesis in Philosophy of Expert Systems, Rutgers Academic Life Scholarship.

**Certified Information Systems Auditor (CISA)**, 1996.

**Certified Information Security Manager (CISM)**, 2002.

**Certified in the Governance of Enterprise IT (CGEIT)**, 2008

**Certified Information Systems Security Professional (CISSP)**, 2008.

**BOOKS**

Planned 2018 April 2012	Tentative book title: <i>Financial Cybersecurity Risk Management</i> , coauthor, Springer. <i>Cyber Security Policy Guidebook</i> , lead of five authors with different areas of Cyber Security Policy Expertise, Wiley.
September 2010	<i>Cyber Forensics, Understanding Information Security Investigations</i> , edited this collection of articles by industry experts and provided an introductory framework, Springer.
January 2010	<i>Enterprise Security for the Executive: Setting the Tone at the Top</i> , Praeger.
March 2009	<i>Enterprise Information Security and Privacy</i> , Artech House, co-edited this collection, and wrote chapter on "Information Classification."
November 2007	<i>Stepping Through the InfoSec Program</i> , Information Systems Audit and Control Association (ISACA), peer-reviewed book.
January 2005	<i>Stepping Through the IS Audit, A Guide for Information Systems Managers, 2<sup>nd</sup> Edition</i> . Book published by the Information Systems Audit and Control Association.
January 2000	<i>Stepping Through the IS Audit, A Guide for Information Systems Managers</i> . Book published by the Information Systems Audit and Control Association (ISACA).

See full list of affiliations, educational courses and publications at <http://www.bayuk.com>