Charles T. Harry, PhD
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Summary A senior executive, research scholar, and security professional with over 25 years of experience in economics, cybersecurity, and data analysis across government, private sector, and academia. Deep technical and executive leadership experience leading organizations of over 400 + employees in government, growing private sector business worth over $35 million in sales, and creating strategic global relationships. Core competencies include:

Developing Strategic Vision	**Leading Change**	**Project Management**
Developing Teams	**Risk Modelling**	**Expertise in Cyber**

Education
- PhD, Public Policy, University of Maryland, College Park
- MA, Economics, University of Colorado, Boulder
- BA, Economics, University of Colorado, Boulder

Clearances
TS/SCI

Experience

University of Maryland, College Park 2017-Present

Director, Center for the Governance of Technology in Society (GoTech), *2021-Present*
Responsible for the development and execution the center's operations, research, engagement, and educational outreach activities.

- Leading all elements of GoTech's mission including fund raising, staff recruitment, and execution of research projects tied to critical infrastructure and supply chain risk management. (*Leading People)*
- Leads the engagement with internal university senior leadership and external global partners to develop a world class research center focused on the intersection between technology and governance structures.
- Expanded the center's vision, and worked with external private and public partners to bring cutting edge methods to solve complex policy problems. *(Leading Change, Business Acumen, Results Driven)*
- Established working relationships with private sector companies including LMI and CISCO to bring in graduate students to work on applied analytical problems that require the use of advanced modeling capabilities including ML, Graph, and Agent Modeling. (*Building Coalitions*)
- Established a project on critical infrastructure risk assessment leveraging new analytic methods to model and assess strategic effects of cyber attacks across a range of threat actors which has garnered substantial interest by government officials including those on Capitol Hill and the IC. The project has led to direct engagement with large Fortune 500 companies to model supply chain risk using a combination of graph analytics and complex system modeling. *(Leading Change)*
- Authored 2 new papers exploring strategic consequence of cyber attacks on transport critical infrastructure and have appeared in media including NPR, al-Hura, Breaking Defense, and Wired. Research results from this initiative have been briefed directly to senior government leaders including the Commander of CYBERCOM and presented at the 2021 NATO CyCon conference in Tallinn Estonia.
- Created a strategic relationship with the Advanced Research Laboratory for intelligence and Security (ARLIS) providing contracted analytic support on a range of intelligence and security projects focused in infrastructure risk and consequence measurement. (*Business Acumen)*
- Partnered with Coursera to launch a "Cybersecurity for Everyone" course that is in the top 5% of all Global MOOCs with over 200K enrolled students. (*Results Driven*)

Associate Research Professor (School of Public Policy & Information Studies School) *2017-Present*

Professor in the School of Public Policy (5th Ranked National Security Program in U.S) and Information Studies College (4th Ranked Program in U.S), teaching courses in cybersecurity, cyber risk modeling, data analysis, and international security.

- Led the development of new curriculum in the school including the introduction of machine learning techniques that expanded the exposure to graduate students in the program. *(Leading Change, Result Driven)*
- Focused on research tied to cybersecurity risk, measurement of severity, and critical infrastructure protection with over $3M in research and teaching grants acquired through the effort and the filing of a patent for a novel analytic method. (*Business Acumen)*
- Awarded the 2017 University of Maryland Invention of the Year for development of an innovative method for assessing cyber risk in organizations and critical infrastructure that has led to the establishment of a software package that enables complex risk analysis. *(Leading Change, Results Driven)*

Courses: PLCY 798P Data Analysis for Policy Makers, PLCY 720 International Security Policy, BUS1758, PLCY 688C Cybersecurity Policy, PLCY 388Q Introduction to International Security, PLCY 388C Practical Hacking for Policy Makers, and HACS208 The Policy Dimensions of Cybersecurity.

Director of Operations, Maryland Global Initiative for Cybersecurity *2017-2021*
Drive the Provost's outreach, internal coherence, and educational capacity building in partnership with campus academic units and the provost office to expand the University's engagement with global partners.

- Led the University of Maryland's engagement to train senior leaders of the Japanese government ahead of the 2020 Tokyo Games and provided expert testimony to the Japanese Diet. ((*Building Coalitions*)
- Led efforts to integrate private sector including the venture capital community, state government officials, and foreign officials including members of the Indonesian, Japanese, and Israeli government. (*Building Coalitions)*
- Led and managed the design and execution of the Cybersecurity Executive Summit that brought in globally recognized experts from NSA, the White House, Google, Amazon, CISCO, and the national labs. The event was identified as an exemplar by the attendees and the University President of how academia could positively influence the interactions between the public and private sector to address significant policy challenges. *(Business Acumen, Building Coalitions, Results Driven)*

Senior Research Associate, Center for International and Security Studies at Maryland (CISSM) *2017-Present*
Senior Researcher focused on international security topics including cyber security and nonproliferation.

Decision Point Analytics **2017-Present**

Co-Founder and CEO,
Leads the vision and execution of a risk management consulting firm focusing on integrated cybersecurity risk for complex organizations and critical infrastructure sectors.

- Inventor of the TAPESTRY application which utilizes proprietary means of risk measurement including the Cyber Disruption Index (CDI), Cyber Exploitation Index (CEI), and the Strategic Disruption Index (SDI). Clients include: Department of Energy, CPS Energy, Bain and Company, Dentons, Department of State, Blue Voyant, and several financial services companies. *(Leading Change, Results Driven)*
- Managed the onboarding of contracted employees to design and build a software platform used to execute on numerous contracts with the private and public sector *(Leading People, Business Acumen)*

Orbis Operations **2014-2017**

Vice President, Cyber and Analytic Solutions *2014-2017*

- Developed a strategic vision for the company and oversaw its execution across 4 contracts and lead to the development of a new platform that transformed computer network operations within the client space. *(Leading Change, Business Acumen)*
- Built the cyber division from $2 M in sales to over $35 M in the span of 2 years. (*Results Driven , Business Acumen)*

- Led the identification of new business opportunities, developed industry partnerships and spearheaded the recruitment of 25 new software engineers, data scientists, and cybersecurity analysts. (*Leading People, Business Acumen)*
- Executive leader providing guidance and direction for the CEO and institution investors on the growth prospects in both federal and private sector spaces and oversaw multi-year projects that leveraged analytic services and cloud development. *(Leading Change)*

National Security Agency (NSA) 2003-2014

Deputy Office Chief, Combined Military and Access Strategies (GS-15, DISL Select) 2013-2014

- Developed, communicated, and executed a strategic vision to radically transform an underperforming organization. Standardized collection posture and access strategies that could be used by national event managers and senior policy makers in response to national security challenges. *(Leading People, Leading Change, Results Driven)*
- Managed underperforming staff and contractors to radically increase productivity across 3 divisions. (*Leading People)*
- Led the design and execution of a mixed methods approach to data analysis that enabled a robust process for executive leadership to make strategic investment decisions. Worked with stakeholder organizations to identify the business processes, data metrics, and systems that allow better measurement of operational value that drove return on investment calculations. *(Leading Change)*

Division Chief (GS-15), Counter Proliferation 2010-2013

- Restructured a failing organization by developing strategies with measurable goals. Hired key technical talent to drive capability against the highest priority mission at the agency. Efforts lead to a radical transformation of the organization's culture and increased productivity by over 200% in two years leading the director of the National Security Agency to cite the organization as a model. *(Leading Change, Leading People)*
- Developed talent within the organization through structured rotations and training to expand the cadre of expertise. Efforts lead to increased gains to productivity and access against a hardened target set. Cited by senior leadership as a model for development of human resources. Senior leadership has adopted the method for use by other organizations. (*Leading People, Business Acumen, Results Driven)*
- Expanded budget and organizational infrastructure to increase the quantity and quality of information generated for the IC. (*Business Acumen)*
- Principal advisor to IC executive leadership for the most important national security target. Frequently called on to provide expert testimony and analysis of events in the region. (*Building Coalitions*)
- Responsible for providing direction and recommendations for future action. Called on to give regular updates to US government leadership and critical foreign partners on extremely sensitive matters. (*Building Coalitions*)
- Responsible for building and maintaining critical international relationships. Led to groundbreaking cooperation resulting in significant advances in our understanding of a specific intelligence problem. (*Building Coalitions*)
- Responsible for providing regular updates of progress to the Director of the National Security Agency, senior officials at the Office of the Director of National Intelligence, and other members of the intelligence community. Provided regular expert testimony to congressional committees and senior White House officials. (*Building Coalitions*)

Senior Intelligence Analyst/Computer Network Operations (GS-12-GS-14) 2003-2010

- Developed and led Computer Network Operations (CNO) to exploit technical vulnerabilities in digital networks in order to obtain strategic and actionable foreign intelligence and facilitate network warfare. Directly impacted U.S. national intelligence and policy directives to track and thwart WMD programs as well as counter intelligence threats.
- Aggressively pursued targets utilizing skills such as global network analysis (social, digital, and computer networks) to facilitate Computer Network Operations by exploiting intelligence sources.

- Served as a senior NSA analyst working on highly complex and sensitive Computer Network Exploitation (CNE) operations. Achievements were recognized by the IC with the awarding of the DNI Exceptional Achievement Medal on two separate occasions.

Science Application International Corporation (SAIC) **Jan 2001-Sept 2003**
National Security Analyst/Economist

Served as the chief analyst responsible for understanding the economic effects of terrorist use of Nuclear, Chemical, and Biological weapons on European and US targets. Developed the first use of Computable General Equilibrium modeling to estimate broad economic effects of terrorist attacks. Received the SAIC exceptional achievement award for this effort.

- Developed economic impact methodology and analysis resulting from a WMD attack for the White House Council of Economic Advisors. Results were briefed to the Vice President of the United States (VPOTUS). Served as a principal designer of the TOPOFF-Top Officials exercise for the President of the United States' cabinet.
- Developed table-top game with the UK Home Secretariat's Office for a bilateral top officials exercise to help prepare for a biological event.
- Provided direct analytic support to the Nuclear Matters staff to include research, program analysis, cost estimation, and support to Department of Energy nuclear weapons programs.
- Represented SAIC at National Defense University symposiums on the Economic Impacts associated with Radiological Dispersal Devices (RDD).

Other Relevant Positions
Australia New Zealand Direct Line, Trade Analyst
Elevations Credit Union, Regional Banking Analyst

Technical & Leadership Skills
- Adaptive Agent Simulation, Statistics, and Machine Learning: NetLogo, Python, and R
- Computer Security: Hacking Fundamentals, Kali/Metasploit Framework, Wireshark, Burp Suite
- Database: SQL Server, Access
- Graph: Gephi, R iGraph Package
- Leadership: 1000+ hours of executive training in organizational leadership

Awards
- Distinguished Faculty Award, ACES, University of Maryland 2024
- Invention of the Year, Office of Technology Commercialization, University of Maryland 2017
- Signals Intelligence Directorate, Career Achievement Award, National Security Agency 2014
- Yammamoto-Schefflin Prize, Center for International Security Studies at Maryland (CISSM) 2013
- Fellowship (Full Support), National Security Agency 2012
- Intelligence Integration Medal, Office of the Director of National Intelligence 2011, 2013
- CIA Counter Proliferation Medal 2012
- Exceptional Achievement Medal, Office of the Director of National Intelligence 2013,2009
- CIA Exceptional Achievement Award 2008
- DTRA Letter of Commendation 2003
- SAIC Exceptional Achievement Award 2003

Associations & Affiliations
External Advisor, Bain & Company (2019-Present)
External Advisor, Maximus (2022-Present)
Senior Research Associate, Center for International and Security Studies at Maryland (CISSM) (2017-Present)
Member, US Chamber of Commerce Cyber Leadership Panel (2015-2019)
Member, Association for Public Policy Analysis and Management (APPAM)

Service Commitments
Executive Committee, SPP Assembly – Member
UMD Conflict of Interest Board-Member
Information Studies College, MIM-Socio-Technical Cybersecurity Subcommittee-Member
Maryland Global Initiative for Cybersecurity (MAGIC) – Director of Operations

Peer Reviewed Journals

Harry, C., Sivan-Sevilla, I., & McDermott, M. (2025). Measuring the size and severity of the integrated cyber attack surface across US county governments. Journal of Cybersecurity, 11(1), tyae032.

Vivek, S., & Harry, C. (2022). Evaluating the Strategic Consequences of Cyber Targeting Strategies on Road Transport Networks: A Case Study of Washington DC. International Journal of Cyber Warfare and Terrorism (IJCWT), 12(1), 1-14. http://doi.org/10.4018/IJCWT.314942

Harry, C. (2020). The challenge of assessing strategic cyber security risk in organisations and critical infrastructure. *Cyber Security: A Peer-Reviewed Journal*, *4*(1), 58-69.

Harry, C., & Gallagher, N. (2018). Classifying Cyber Events. *Journal of Information Warfare*, *17*(3), 17-31.

Book Chapters
Harry, C & Gallagher, N (2023) "Categorizing Cyber Effects", The Elgar Companion to Digital Transformation, Artificial Intelligence and Innovation in the Economy, Society and Democracy. Edward Elgar Publishing

Patents
Harry, C. T., & Trevor, T. A. R. T. (2023). U.S. Patent No. 11,734,636. Washington, DC: U.S. Patent and Trademark Office.

Conference Proceedings

Harry, C., Samuelson, L, Haas, C., Lidard, C., (2022). *An Analysis of Russian Federation Attributed Cyber Attacks 2014-2020*. 2022 *APPAM Research Conference*. APPAM.

C. Harry and S. Vivek, (2021) "Strategic Cyber Effects in Complex Systems: Understanding the US Air Transportation Sector," *2021 13th International Conference on Cyber Conflict (CyCon)*, 2021, pp. 111-131, doi: 10.23919/CyCon51939.2021.9468293.

Gallagher and Harry, (2020) "*A Cybersecurity Risk Assessment Framework to Enhance Communication and Cooperation across Sectors and among Countries*", International Studies Association, 60th ISA Conference

Harry, C. (2018). A Proposed Hierarchical Taxonomy for Assessing the Primary Effects of Cyber Events: A Sector Analysis 2014-2016. In *European Conference on Cyber Warfare and Security* (pp. 199-XII). Academic Conferences International Limited.

Harry, C. (2016). A Framework for Categorizing Disruptive Cyber Activity and Assessing its Impact. In *International Conference on Cyber Warfare and Security* (p. 172). Academic Conferences International Limited.

Published Data Sets
University of Maryland Cyber Attacks Database, hosted at https://gotech.umd.edu/

Editing Efforts
Outside commentor for "Cybersecurity Economics for Emerging Economies", World Bank, 2024

Reports

Harry, C., Stephens, W., Hedberg Jr. , T., (2024) "*Recommendations for User Activity Monitoring in Microsoft Office 365 to Mitigate Insider Risks*" , Applied Research Laboratory for Intelligence and Security (ARLIS), University of Maryland, June 2024

Entrikin, D., Harry, C. (2024) "*Cyber Threat Landscape in the Transport & Warehousing Industry*", Center for the Governance of Technology and Systems (GoTech), June 2024

Harry, C., Lucyshyn, W., Entrikin, D. (2024) "Correlating Population Demographics with County-Level Critical Infrastructure Vulnerabilities", Social Data Science Center, May 2024

Harry, C., Samuelson, L., Gallagher N. (2022) " *A Systems Approach for Assessing Cybersecurity Risk for IAEA Nuclear Safeguards*", Department of Energy

Harry, C., Samuelson, L, Haas, C., Lidard, C., (2022). *An Analysis of Russian Federation Attributed Cyber Attacks 2014-2020*. Carnegie Endowment for International Peace

Choi, J. S., Gallagher, N., & Harry, C. (2020). "An Effect-Centric Approach to Assessing the Risks of Cyber Attacks Against the Digital Instrumentation and Control Systems at Nuclear Power Plants.", IAEA

Harry and Gallagher, (2019) "Understanding Cyber Effects for Risk Assessment and Persistent Engagement", Working Paper, CISSM, University of Maryland

Harry & Gallagher, (2019) "An Effects-Centric Approach to Assessing Cybersecurity Risk", CISSM Report, March 2019

Invited Presentations (Recent)

DoJ/UMD Joint Conference on Cybersecurity (November 2024)

IFC Webinar for the Ukrainian Banking Sector (July 2024)

World Bank & Health Ministry of Zambia (July 2024)

Center for Social Data Science (May 2024)

National Governors' Association (November 2023)

US Attorney-MD Office - Panel Moderator (November 2023)

Maryland Municipal Government Cybersecurity Council (September 2023)

European Systemic Risk Board (September 2023)

UMD Financial Cybersecurity Conference (January 2023)