Charles T. Harry, PhD Director of Operations & Associate Research Professor 4716 Pontiac St, College Park MD 20142 301-405-3073 (O) charry@umd.edu

Education

University of Colorado	Boulder, CO	Economics	BA 1995
University of Colorado	Boulder, CO	Economics	MA 2000
University of Maryland	College Park, MD	Public Policy	PhD 2013

Professional Appointments

University of Maryland (2017-Present)

Director of Operations, Maryland Global Initiative for Cybersecurity, 2017-Present

Drive the university's outreach, internal coherence, and educational capacity building in partnership with campus academic units and the provost office. Lead efforts to integrate private sector and government organizations to partner and invest in university activities. Work in conjunction with senior faculty and leadership to identify areas where the university can positively contribute to professional education, new opportunities for public-private partnerships, and promote the university's broad research agenda.

Associate Research Professor, 2017-Present

Professor in the School of Public Policy, teaching courses in cybersecurity and international security. Focused on research tied to cybersecurity risk, measurement of severity, and critical infrastructure protection. 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.

Senior Research Associate, Center for International and Security Studies at Maryland (CISSM), 2017-Present

Orbis Operations (2014-Present)

Senior Advisor & Principal Consultant, 2017-Present

Work with corporations and governments to assess strategic risk resulting from a range of cybersecurity threats, tactics, and vulnerabilities. Advise the CEO and CFO on strategic opportunities in the area of cybersecurity and training opportunities for foreign officials and governments.

Vice President, Orbis Operations, 2014-2017

Built Orbis' cyber division from \$2 M to over \$35 M in the span of 2 years. Led the identification of new business opportunities, developed partnerships and spearheaded the recruitment of 20 new software engineers and cybersecurity analysts.

National Security Agency (2003-2014)

Deputy Office Chief, Combined Military Planning and Access Strategies, 2013-2014

Developed, communicated, and executed a strategic vision to radically transform an underperforming organization. Standardized planning and strategies that could be used by national event managers and senior policy makers in response to national security challenges. 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.

Division Chief, 2010-2013

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 Called on to give regular updates to US government leadership and critical foreign partners on extremely sensitive matters. Built and maintained critical international relationships. Led to groundbreaking cooperation resulting in significant advances in our understanding of a specific intelligence problem. 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.

Senior Intelligence Analyst (Cyber), National Security Agency, 2003-2010

Developed creative solutions to answer analytic questions and solve difficult problems. Conducted research, developed query strategies, and analyzed foreign target intelligence to produce reports and recommendations. Provided time-sensitive mission support by maintaining situational awareness of potential cyber threats. Leveraged technical methods to manage, monitor and execute large-scale operations in response to national security requirements.

Other Selected Positions

National Security Analyst, Science Application International Corporation (SAIC), 2001-2003 Regional Economist, Elevations Credit Union, 1998-2000 Market Analyst, Australia New Zealand Direct Line, 1997-1998

Publications

Gallagher & Harry, "A Cybersecurity Risk Assessment Framework to Enhance Communication and Cooperation across Sectors and among Countries", International Studies Association, 60th ISA Conference, 2019

Harry & Gallagher "Classifying Cyber Events: A Proposed Taxonomy", Journal of Information Warfare, Vol 17, Issue 3, 2018

Harry "A Proposed Hierarchical Taxonomy for Assessing the Primary Effects of Cyber Events: A Sector Analysis 2014-2016" Proceedings of the 17th European Conference on Cyber Warfare and Security, Oslo Norway, July 2018

"Colorado Springs Military Skills Separation Inventory & Analysis", April 2018, Colorado Springs Chamber of Commerce

2017 "Categorizing and Assessing the Severity of Disruptive Cyber Incidents", Center for International and Security Studies at Maryland (CISSM), April 2017

Harry & Gallagher "A Proposed Hierarchical Taxonomy for Assessing the Primary Effects of Cyber Events: A Sector Analysis 2014-2016", Working Paper, Center for International and Security Studies at Maryland, February 2018

Harry "A Framework for Categorizing Disruptive Cyber Activity and Assessing its Impact" Proceedings of the 11th International Conference on Cyber Warfare and Security (ICCWS) Harry "Deteriorating Economic Condition and the Emergence of Social Instability" Policy Brief, CISSM, July 2013 "The Effect of Economic Condition on Civil Unrest: New Insights from Agent Based Modelling" PhD Dissertation, 2013

(d) Synergistic Activities

- Organizing the University of Maryland's first cybersecurity executive summit (April 2019)
- Developed the Cyber Disruption Index (CDI) algorithm (2018)
- Developed the Cyber Exploitation Index (CEI) algorithm (2018)
- Served on the US Chamber of Commerce Cyber Advisory Board (2017-Present)
- Served on National Cybersecurity Center of Excellence (NCCoE) Industrial standards IoT technical exploratory panel (2018)