

# Marymount University - School of Technology and Innovation

## Curriculum Vitae

### *Contact Information*

Name: **Diane Rosemary Murphy**  
Address: Marymount University 2807 N Glebe Rd  
City, State, Zip: Arlington VA 22207  
Telephone: 703 284 5958  
Email: dmurphy@marymount.edu

### *Education*

University of Sheffield, Sheffield, England as Diane R Eakin  
PhD, Information Science, 1977  
Dissertation: "The Evolution of an On-line Chemical Search System for an Industrial Research Unit"

Summary: The objectives of this study were to design an information system, using modern computer technology, to meet a research chemist's need for chemical structural information; to quantify the effects of increasing degrees of computer technology on the use made of the information; and to relate the use of the services back to the individual chemist, their performance and background.

University of Sheffield, Sheffield, England as Diane R. Lambourne  
MSc, Library and Information Studies, 1970  
Dissertation: "Correlation of the Occurrences of Some Simple Fragments in Chemical Compounds"

Summary: Programs were written in PLAN for use on an ICL 1907 machine, and these set up correlation matrices for a series of screening fragments, Results for the correlation between pairs of atoms in a file of over 20,000 chemical compounds were analyzed.

University College, University of Wales, Cardiff, Wales as Diane R Lambourne  
BSc, Chemistry, Summa Cum Laude, 1969  
Minor: Metallurgy

## *Employment History*

**Marymount University**

**August 2001 to Present**

**Director, School of Technology and Innovation. July 2020 to present**

**Professor of Information Management, August 2013 to present**

**Associate Professor of Information Management, 2007- 2013**

**Assistant Professor of Information Management, 2002-2007**

**Adjunct Professor, Information Systems, 2001-2002**

### *Teaching*

- Full-time faculty in the School of Technology and Innovation.
- Courses taught in the past five years include undergraduate IT courses, from freshman to senior; undergraduate seminars focusing on career readiness; undergraduate research experiences; undergraduate courses for business students; general university research courses, master's graduate courses in the graduate IT and Cybersecurity programs, and doctorate courses in Cybersecurity

### *Grants*

#### *National Science Foundation (NSF)*

- Principal Investigator for a grant under the Secure and Trusted Computing (SATC) program to create and implement an innovative program to address the need for more terminally-qualified teachers in the cybersecurity field (2019 – 2023).
- Principal Investigator for a grant under the CyberCorps Scholarship for Service (SFS) program which provided scholarships for highly talented students studying cybersecurity (2014 – 2021).
- Principal Investigator for a grant to research the effect of the development of a female friendly cybersecurity competition based on a healthcare initiative (2013 – 2016)
- Co-PI for a grant to use mobile app development to increase the number of students in technology (2013 – 2016).

#### *National Security Agency (NSA)*

- Program Manager for the NSA sponsored GenCyber Summer Camps (residential and day camps) for high school students (July 2015, 2016, 2017, and 2018)

#### *Commonwealth Cyber Initiative (CCI)*

- Principal Investigator for Marymount University, in collaboration with George Mason University, to study the gap between cybersecurity employers and educators in the region (2019-2021)
- Principal Investigator for Marymount University, in collaboration with George Mason University, to develop and run a CyberAI program for high school students (2019-2021)
- Principal Investigator for Marymount University, in collaboration with George Mason University, to develop a network of opportunities for students to understand startups and intern with them (2020-2023)

*State Council for Higher Education in Virginia (SCHEV)*

- Vice-Chair, Optimizing Experiential Learning for a Diverse Student Population at Marymount University, to study how experiential learning can be improved for underrepresented students (2022-2023).

*Contracts*

- Program Manager for the Pathways program for the U.S Army Executive Office (PEO) Simulation, Training and Instrumentation (STRI) Threat Systems Management Office (TSMO) Test and Evaluation Cyber Center of Excellence (TECCE). The project includes faculty and student research. (2021-2022)
- Program Manager for a cybersecurity research project for NTT Data specializing in the security of data lakes on the cloud and automating processes to ensure data security (2021-2022).
- Program Manager for the Fulbright Commission's Global Exchange on Cybersecurity Education to encourage Eastern European faculty to develop high quality cybersecurity programs in their institutions through on-line programs and site visits to the U.S. (2021-2022)

*Curriculum Development*

- Managed the curriculum development process for a B.S. in Computer Science and B.S. Cybersecurity to begin in fall 2022.
- Played a primary role in the initiative to develop the framework and the technical curriculum for a DBA in Business Intelligence that began in fall 2021.
- Developed the concept of "stackable" certificates in the graduate program to facilitate the reskilling and upskilling of technology and business professionals. Implemented certificates in Cybersecurity, Data Science, Digital Transformation, Health Care Informatics, Project Management, Intrapreneurship and Leadership (12 credits each); implemented in Fall 2020, and the MS Emerging Technology, implemented in Fall 2020, to combine 3 stackable certificates in a master's degree.
- Extended the stackable certificate concept in fall 2020 to include a Certificate in Business Information Technology and the combination of 3 appropriate certificates into an MS in Technology Management introduced in Fall 2021.
- Developed an accelerated second degree in Cloud Computing, working closely with Amazon Web Services, that started in Fall 2020.
- Played the primary role in developing proposing new curriculum documentation for approval by the university in the 2017-2018 and 2018-2019 including undergraduate specialties in game design and development and cloud computing; master's level specialties in data science and digital transformation; and a second accelerated degree in Cybersecurity. These new programs were approved and began in Fall 2019.
- Led the department in an initiative to develop the framework and curriculum for a doctorate (DSc) in cybersecurity curriculum, including a SACS Substantial Change proposal. Obtained approval through various university committees for its development and implementation in Fall 2018 (Fall 2015 through Spring 2018). It was successfully implemented in Fall 2018.

- Led the development of the package that was used to designate Marymount as a Center for Academic Excellence in Cyber Defense Education (CAE/CDE) by the National Security Agency/Department of Homeland Security (2015 through 2021)
- Increased the specialties available to undergraduate IT students to add Interactive Media, Networking and Computer Security, Applied Cybersecurity, Data Science, Game Design and Development, and Cloud Computing, work included developing new course curricula and preparing required documentation for the university's Undergraduate Curriculum and Instruction Committee approval (2012, 2013, 2014, 2017, and 2018)
- Worked with other faculty, developed and implemented the MS in Cybersecurity in Fall 2012, including preparing required documentation for the university's Graduate Studies Committee approval and a SACS Substantial Change proposal.
- Worked with other program directors to develop and introduce the dual degree master's programs (MBA/IT and HCM/IT) in Fall 2009 and MBA/Cybersecurity and IT/Cybersecurity in Fall 2017, including preparing required documentation for the university's Graduate Studies Committee approval.
- Spearheaded the launch of the IT program (combining previous programs in information systems and computer science) with both graduate and undergraduate offerings in Fall 2007.

#### *Student Research*

- Supervised student research projects in information technology and cybersecurity leading to oral presentations and poster sessions at the Student Research Conference and professional conferences (annually since Spring 2011).
- Committee Chair and committee member for dissertations in the DSc in Cybersecurity program (2020 to present).

#### *Administration/Leadership*

- Champion, leading the implementation and funding for the Marymount University Center for the Innovative Workforce to focus part of the primary university's research initiatives on the innovative workforce of tomorrow that meets the world's economic, demographic, and societal needs. (2021-2022)
- Director, School of Technology and Innovation: leading one of the three schools in the College of Business, Innovation, Leadership, and Technology (BILT) to ensure the school programs maximize the interactions between business, design, and technology and meet the needs of the "what's next" economy. (2020 – present)
- Chair, Department of Information Technology (IT), Data Science and Cybersecurity, leading the department's innovation and growth, administering the schedule of classes, managing the adjunct pool, and representing the department on school and university activities. (2006 to 2020).
- Program lead for all technology programs (BS IT, Accelerated BS in Cybersecurity, MS IT, MS Cybersecurity and DSc Cybersecurity), participating in recruitment events to grow graduate and undergraduate programs.
- Program Director for MS IT and BS IT, preparing annual outcome reports and 5-year reviews for the undergraduate IT program as well as the graduate IT and cybersecurity programs.

- Worked extensively with Undergraduate Admissions and Professional Advisors to ensure they are aware of all program changes and opportunities to facilitate students' progress through the various program.
- Worked with Graduate Admissions to facilitate the evaluation of applications for the MS Information Technology, MS Cybersecurity, MS Emerging Technology and Certificate programs, DSc Cybersecurity including conducting interviews for the doctoral program.

#### *Advising*

- Worked as one of the department's program academic advisors, advising students in the undergraduate and graduate IT/cybersecurity programs, working extensively with females, under-represented minorities, veterans, scholarship students, students on probation, and international students. (2004 -to 2021)

#### *Conference Management*

- With Dr. Susan Conrad, Dr. Donna Schaeffer and Dr. Natalia Ermicioi (Bell), hosted the Consortium for Computing Sciences in Colleges (CCSC) 37<sup>th</sup> Eastern Regional Conference which was held at Marymount University on October 22-23, 2021.
- With Dr. Donna Schaeffer and Dr. Nathan Green, hosted the Consortium for Computing Sciences in Colleges (CCSC) Eastern Regional Conference which was held at Marymount University on October 18-19, 2018.
- With Dr. Donna Schaeffer and Dr. Michelle Liu, chaired the Consortium for Computing Sciences in Colleges (CCSC) Eastern Regional Conference which was held at Marymount University on October 14-15, 2011.

#### *Out-of-Classroom Student Activities*

- Faulty Advisor for the Upsilon, Pi, Epsilon (UPE) Honor Society (2012 to date)
- Director, The Cyber Center, organizing external speakers and workshops in the IT and cybersecurity fields (2013 to date)
- Academic Advocate and Faculty Advisor for the student group of ISACA, a primary professional association in the field (2014 to date)
- Faculty Advisor for the Marymount ACM-W chapter (2020 to date)
- Member of the Clare Booth Luce Scholarship Selection Committee, promoting women in scientific research (2007 to date)
- Academic liaison for the Information Systems Security Association (ISSA), ISC<sup>2</sup>, and Blacks in Cybersecurity holding professional meetings at the Ballston site. (2017 to date)

#### **Fairfax County Public Schools** **Senior Systems Analyst**

**June 2002 to August 2012**

- Part-time member of the Department of the Information Technology (DIT), Division of Enterprise Information Systems, Instructional Services team working as an information architect and requirements analyst on special projects to support the one of the largest school systems in the U.S. Provided practical experience in requirements definition and lifecycle program management to support system-wide assessment activities.

**Keller Graduate School of  
Management, DeVry University  
Full-time Instructor**

**November 1999 to August 2002**

- Taught a variety of graduate courses in information management and computer systems in support of Keller's Master's in Business Administration (MBA) and Masters in Information Management (MSIM) programs.

**Information Technology Management Institute  
Consultant and CEO**

**July 1997 to September 2008**

- Founded and managed the operations of a training company, supporting 12 full-time employees and over 30 consultant instructors throughout the US. Courses were offered through large corporations (such as Verizon) and through universities (such as the University of Pittsburgh). Taught a variety of courses including electronic commerce, computer security, and government procurement.

**Procurement Automation Institute (PAI)  
President & CEO**

**July 1988 to February 1998**

- As CEO and founder, managed a growing organization from its formation to a company with 45 employees until its acquisition by DSIC in 1998. The company was resold in 2000 to SAP and the software developed by the company was made part of SAP's enterprise resource planning (ERP) offerings to the Federal government.

**Network Management Inc. (NMI)  
Senior Vice President**

**January 1980 - June 1988**

- As Vice President, ADP services, supervised 150 employees and provided corporate support to some 65 ongoing information technology projects for a variety of government clients. Specialized in expert systems design, data security, and software development.
- Researched the design and development of an expert system, the Chemical Regulations and Guidelines System (CRGS), for the Environmental Protection agency in the early 1980s using chemical structural analysis to predict the toxicity of chemicals in the workplace.

**Fraser-Williams (Scientific Systems) Ltd., England  
Project Manager/Consultant**

**Sept. 1977 – December 1980**

- International consultant and renowned expert in the field of chemical informatics, as one of the early researchers in this new field.

**Imperial Chemical Industries, Manchester, England  
Analyst/Programmer**

**Oct. 1970 – Aug. 1977**

- Principal investigator and analyst, designer, programmer, and data security specialist for chemical, biological, and toxicological data applications in pharmaceutical research, for a large multinational chemical company (now Astra-Zeneca).

## *Professional Licenses/Certification*

**Certified Software Tester (CSTE)**, awarded in fall 2010 by the QAI Global Institute (QAI) ([www.qaiglobalinstitute.com](http://www.qaiglobalinstitute.com))

## *Other Academic or Professional Achievements*

Recipient of the inaugural 2021 Marymount University Halo Award for Distinguished Faculty recognizing innovation in education and service to the community.

Recipient of the State Council for Higher Education in Virginia (SCHEV) Outstanding Faculty Award for 2020, one of 12 state-wide educators selected each year.

In spring 2015, part of a Data Science team that won the Arlington Public Schools competition to predict student success from student attendance and performance data using data analysis techniques.

Received an award and was commended by Falls Church Senior Center and the Falls Church City Council on November 27, 2018 for work in helping seniors learn technology.

## *Scholarship*

### *Publications*

2022

Liu, X., Murphy, D., (2022). Alternative Approaches to Data Architecture and Data Governance: Graduate IT/IS Curriculum Considerations, submitted to Innovative Research Informing Practice, AMCIS 2022 Conference.

Ermicioi, N., Liu, X., Murphy, D., (2022). A Framework to Implement Academic Digital Badges when Reskilling the IT Workforce. Information Systems Education Journal 20(1) pp 36-46. <http://ISEDJ.org/2022-1/>

Murphy, D., Tryfona, N., and Marshall, A. (2022): A Targeted Study on the Match between

Cybersecurity Higher Education Offerings and Workforce Needs, Submitted to the Virginia Journal of Science (February 2022)

Hall, A., Liu, X., & Murphy, D. (2021, October 13-16). Integrating Andragogy Theory into a Multidisciplinary Curriculum to Achieve a Connected Program for a Doctorate in Cybersecurity. Paper Presented and published in the Proceedings of the Frontiers in Education (FIE) Conference, Lincoln, Nebraska

#### *2021*

Liu, X. & Murphy, D. (2021, Sep.30-Oct.1). Building a Skills-focused Educational Pathway in IT/IS Programs to Skill-based Hiring. Paper presented and published in the Proceedings of 2021 SEINFORMS (Southeast INFORMS Conference), Myrtle Beach, SC.

Liu, X. & Murphy, D. (2021). Skills-Focused Academic Changes to Respond to the Impact of COVID-19 on the IT Workforce, Proceedings of the 2021 AIS SIGED International Conference on Information Systems Education and Research 12-13-2021

Liu, X. & Murphy, D. (2021). “BILT for Success”: An Alternative Education Strategy to Reskill the Business and Technology Professional for a Sustainable Future, Information Systems Education Journal, Vol 19 (7) p4-14. <http://isedj.org/2021-19/n2/ISEDJv19n2p4.pdf>

#### *2020*

Liu, X. & Murphy, D. (2020). A Multi-Faceted Approach for Trustworthy AI in Cybersecurity, Journal of Strategic Innovation and Sustainability Vol 15(6)

Green, N., Liu, X. & Murphy, D (2020). Using an Electronic Resume Analyzer Portal (e-RAP) to Improve College Graduates Employability, Information Systems Education Journal Vol 18, pp28-37, 2020

#### *2019*

Green, N., Liu, X. & Murphy, D (2019). Developing an Electronic Resume Analyzer Portal (e-RAP): A Natural Language Processing Approach to Enhance College Graduates Job Readiness, 2019 Proceedings of the EDSIG Conference, Cleveland Ohio November 2019

Green, N., Liu, X. & Murphy, D (2019). Revisiting an Educator’s Dilemma: Using Natural Language Processing to Analyze the Needs of Employers and Inform Curriculum Development, Journal of Computing Sciences in Colleges, 34 (3) 97-107

#### *2018*

Liu, X. & Murphy, D. (2018, March 23-24), Constructing A Connected Program In IT/IS: A Non-R1 University Case, the Proceedings of the 21<sup>st</sup> Annual Conference of the SAIS (Southern Association for Information Systems), Atlanta, GA.



Mbaziira, A.V., & Murphy, D.R. (2018). An Empirical Study on Detecting Deception and Cybercrime Using Artificial Neural Networks. Proceedings of the 2<sup>nd</sup> International Conference on Compute and Data Analysis, ICCDA 2018

#### 2017

Liu, X. & Murphy, D. (2017): Are They Ready? Integrating Workforce Readiness into a Four-Year College IT/IS Curriculum. Paper presented and published in the Proceedings of the 20<sup>th</sup> SAIS (Southern Association for Information Systems Conference, St. Simons, GA

#### 2016

Liu, X. & Murphy, D. (2016): Engaging Females in Cybersecurity: K through Gray. Paper presented and published in the 2016 Proceedings of IEEE (Institute of Electrical and Electronics Engineers) ISI (Intelligence and Security Informatics) Conference, Tucson, AZ.

Knott, C. Liu, X., & Murphy, D. (2016). Data without Borders: Privacy, Data Ownership, and Legal Concerns for Data in the Cloud. Paper published in the 2016 Proceedings of the Southeast Decision Sciences Institute Annual Meeting, February 17-19, 2016, Williamsburg, VA.

#### 2015

Liu, X. & Murphy, D. (2015): They are not All Enemies: Detecting and Deterring Non-Malicious, Privileged IT User Threat Using an Interdepartmental Approach. Paper published in the 2015 Proceedings of the Southern Association for Information Systems Conference, Hilton Head Island, SC (March 20-21, 2015).

Bicak, A., Liu, X., and Murphy, D. (2015): Cybersecurity Curriculum Development: Specialties in a Graduate Program, 2014 Information Systems Education Journal, 13(3) 99

#### 2014

Murphy, D. contributor (2014): (ISC)2 Cybersecurity Workforce Competencies: Preparing Tomorrow's Risk-Ready Professionals, 2014

Murphy, D. and Liu, X. (2014), Redefining Competitions to Increase Female Participation, Women in Cybersecurity Conference (WiCyS) in Nashville, TN (April 11, 2014

Liu, X. and Murphy, D., Inspiring and Cultivating Female Innovators through Mobile App Development (2014). *AMCIS 2014 Proceedings*. 3.

Liu, X. and Murphy, D. (2014). Document Explosion in the World of Big Data – Curriculum Considerations. Information Systems Education Journal 12 (6) 23

#### 2013

Liu, X. and Murphy, D. (2013). Using Mobile Apps to Entice General Education Students into Technology Fields. Information Systems Education Journal, 11(1) pp. 25-32.

Murphy, D., & Murphy, R. (2013, October 12). Teaching Cybersecurity: Protecting the Business Environment. Proceedings of the 2013 on InfoSecCD'13: Information Security Curriculum Development Conference, 88-93

2012

Liu, X. and Murphy, D. (2012), "Fusing Communication and Writing Skills in the 21st Century's IT/IS Curricula", *Information Systems Education Journal*, 10(2) 48

Liu, X. and Murphy, D. (2012), "Tackling an IS Educator's Dilemma: A Holistic Model for "When" and "How" to Incorporate New Technology Courses into the IS/IT Curriculum", *Proceeding of the Southern Association of Information Systems Conference 2012*

2011

Liu, X. and Murphy, D. (2011), "Educate Freshmen: Technology Skills in the Context of Globalization", *Proceedings of the 42<sup>nd</sup> Annual Meeting of Decision Sciences Institute*, Boston, Massachusetts, November 19-22, 2011.

Liu, X. & Murphy, D. (2011), How to make our computing science graduates more "employable"?, the *Proceedings of the 27<sup>th</sup> Annual Consortium for Computing Sciences in Colleges Eastern Regional Conference (CCSCE 2011)*, Arlington, VA, October 14-15, 2011

Eisenhardt, A., Liu, M. & Murphy, D. (2011): Responding to the Global Crisis: Developing an Undergraduate Health Information Management Program, *Journal of Computing Sciences in Colleges*, Volume 26, Number 3, January 2011, p106-114

2009

Murphy, D. (2009): Implementing the Academic Discipline of Information Technology to be Inclusive of Computer Science *Journal of Computing Sciences in Colleges* 4(3) 25-31

2007

Murphy, D. & Murphy, R. (2007). Phishing, Pharming, and Vishing: Fraud in the Internet Age, *Review*, 2007

2000

Murphy, D. (2000), *The Exciting Role of the Credit Manager in the Expanding e-Commerce Marketplace*, Business Credit, New York, 2000

1996

Murphy, D. (1996), *Electronic Commerce: A Government Procurement Perspective*, Procurement Automation Institute 180 pages

1982

Eakin, D. (1982), Graphics Challenge WLN. Can WLN Hold Fast? *Journal of Chemical Information and Computer Sciences* 22(2) 101-103

1974

Eakin, D., Hyde, E & Palmer, G. (1974) The use of computers with chemical structural information: ICI CROSSBOW system, Pesticide Science, 1974

1972

Adamson, G., Lambourne, D. & Lynch, M. (1972) Analysis of structural characteristics of chemical compounds in a large computer-based file. Part III. Statistical association of fragment incidence, Journal of the Chemical Society, Perkin Transactions 1, 2428-2433

### *Conferences/Presentations*

2022

Green, N., Larasati, S., Duro, D., Murphy, D., and Laskey, K. (2022). Fact Rep: A Machine Learning Resource for Identifying and analyzing Misinformation During the COVID-19 Pandemic, at the 51st Annual Meeting of the Southeast Decision Sciences Institute (SEDSI), Feb. 16 - 18, 2022; Jacksonville, FL.)

2021

Liu, X. and Murphy, D (2021). Tutorial on Rethinking College Work Experience for the Skill-Based Hiring Economy at the Consortium for Computing Sciences (CCSC) 37<sup>th</sup> Eastern Regional Conference, Marymount University, October 22-23, 2021.

2020

Murphy, D (2020). Invited member of Panel on Women in Cyber Leadership, at AFCEA TechNet Cyber Conference, December 1 – 3, 2020

Murphy, D. (2020), The Challenges of Cyberspace Education at an American University, invited speaker (virtual) at the “Workshop on Current Issues in Cybersecurity from the Perspectives of Education, Research and Practice” at Széchenyi István University, Győr, on 9 September 2020. (<https://admissions.sze.hu/cyber-security-conference-at-szechenyi-istvan-university>)

Edwards, A., Jenson, A., and Murphy, D. (2020), CyberEducation Funding Opportunities for Small and Mid-Sized Institutions, McAllister and Quinn Webinar, May 13, 2020

Murphy, D. (2020): Technology Reskilling During and After the Pandemic, ISACA Greater Washington DC (GWDC) Chapter Webinar, April 22, 2020

Murphy, D. (2020): What is the Impact of Artificial Intelligence (AI) on Cybersecurity Now and Later? CyCon 3.0, February 15, 2020

2018

Christie, L., Liu, X. & Murphy, D. (2018): Teamwork and Creativity in a Classroom Setting: A Team Activity for Building a Strong Cyber Defense using K’Nex, International MOBTS (iMOBTS) 2018 Conference, Maynooth University, Ireland, June 28-29, 2018

Liu, X. & Murphy, D. (2018, February 21-24). *MUMADE: Marymount University Mobile Apps Development for Everyone*, the NSF project presented in the 2018 NSF Showcase at SIGCSE (Special Interest Group on Computer Science Education), Baltimore, MD.

#### 2017

Conrad, S., Liu, X. & Murphy, D. (2017, June 12-14): Do You Have a Cyber Delinquent at your House? A Strategic Framework to Prevent and Intervene Teen Cybercrimes. Paper presented at the 21st CISSE (Colloquium for Information Systems Security Education), Las Vegas, NE.

#### 2016

Liu, X. & Murphy, D. (2016, November 2): *Build on Institutional Initiatives to Improve Student Success and Broaden Participation in Cybersecurity*. Paper presented at the 2016 Marymount Innovations Conference, Arlington, VA.

Murphy, D. (2016, October 29, 2016): How to Tell If Your Kid is a Black Hat (hacker)? Presented at CyberSecurity Youth Conference, Fairfax, VA

#### 2014

Liu, X. & Murphy, D. (2014, April 11-12): *Redefining cybersecurity competitions to increase female participation*. Paper presented at the first National Women in Cybersecurity Conference in Nashville, TN.

#### 2012

Liu, X. & Murphy, D. (2012, March): *Tackling an IT Educator's Dilemma: A Holistic Model for "When" and "How" to Incorporate New Technology Courses into the Curriculum*. Paper presented at the Southern Association for Information Systems (SAIS) Conference in Atlanta GA.

#### 2011

Liu, X. & Murphy, D. (2011, November): *Educating Freshman: Technology Skills in the Context of Globalization*. Presented at the Decision Sciences Institute, 42nd Annual meeting, Boston, MA.

Liu, X. & Murphy, D. (2011, January 7-8): *Teaching Technology to Business Students for the World of Globalization*. Presented at the Washington Business Research Forum (WBRF) in Washington, DC.

#### 2010

Murphy, D. (2010, September 23-24): *Effectively Maintaining Curriculum in eCART in Times of Change in the Virginia Standards of Learning (SOLs)*. Presented at the Virginia Educational Research Association (VERA) Annual Meeting, Charlottesville, VA.

Eisenhardt, A, Liu, X. & Murphy, D. (2010, January 8-9): *Responding to the Global Crisis: Developing an Undergraduate Program in Health Information Management*. Presented at the Annual Washington DC Business Research Forum.

2009

Gorrell, S & Murphy, D. (2009, September 17-18): *Using Computing Effectively for a Kindergarten Assessment* at the Virginia Educational Research Association (VERA) Annual Meeting, Charlottesville,

2008

Herrington, V., Kelley, D., Murphy, D. Rice, K. & Tyler, E. (2008, September 18-19): *Pre-conference Workshop on Assessment* at the Virginia Educational Research Association (VERA) Annual Meeting, Charlottesville

Murphy, D. & Rice, K. ((2008, March 8 -11): *Being Digital May Not Be Enough*” presented to the Consortium for School Networking (CoSN) at the “Visionary Leadership: Scaffolding 21<sup>st</sup> Century Learning with Technology, Arlington, VA

Murphy, D. (2008, February 4): *Environmental Effects of Technology*” at the SBA Symposium, as part of Marymount University’s Ethics Awareness Week.

2007

Knott, C., Murphy, D. (2017). Teaching Operations Research and Statistical Methodologies Using Reality Television as a Backdrop for Encouraging Student Growth and Learning, 38th Annual Northeast Decision Sciences Institute’s Conference, Baltimore, Maryland March 28-30, 2007

Knott, C., Murphy, D. (2017). Teaching The Analytic Hierarchy Process Methodology Using Reality Television as a Backdrop for Encouraging Student Growth and Learning, 9th International Symposium on the Analytic Hierarchy Process (ISAHP) Conference, August 3 - 6, 2007, Vina del Mar, Chile

### *Professional Development Activities*

Primary interface with the Greater Washington Partnership Capital CoLAB mapping course KSAs against CoLAB requirements to facilitate the CoLAB digital badging of our data science and cybersecurity Programs. (2020 to present)

Panelist, Cybersecurity K through 20+, Cybersecurity Networking Group, March 24, 2022

Discussion Leader on Diversity in Security/Privacy at the National science Foundation (NSF) SATC PI Team Meeting on March 17, 2022

Subject matter expert for the American Council of Education (ACE), reviewing non-traditional education programs, and military programs for college credit (2019- present)

Member of the Leadership Council of the Cybersecurity Cyber Initiative (CCI) Northern Virginia Node (2020 to present)

Member of several National Science Foundation (NSF) Review Committees reviewing proposals in the Secure and Trusted Computing (SATC) program and the Computer Science for All program (2017-19).

Ad-hoc advisor for the Commonwealth Cyber Initiative (CCI) Blueprint group, led by Virginia Tech, and a leading member of the Northern Virginia Hub group, led by George Mason University, (2018-2019).

Subject Matter Expert for the Center for Innovative Technology (CIT) as a member of the evaluation panel evaluating the technical merit and commercialization potential of projects submitted under the state-wide Commonwealth Research Commercialization Fund (CRCF) (2016- 2020).

Subject Matter Expert evaluating proposals from institutions applying for funding for cybersecurity education and research through the CyberFlorida program (2018-2019).

Member of Cybersecurity Panel, at HireEd, Bridging the Education and Workforce Gap, Arlington, VA, (2017, April 5).

Invited speaker on a panel related to cybersecurity programs in community colleges, Community College Workforce Consortium (CCWC), Woodbridge, VA, (2016, September 20-21)

Invited panelist at the Department of Energy's Cyber Distinguished Speaker Series, Washington, DC, (2016, June 23).

Invited panel member, Global STEM Talent Summit, STEM Higher Education Council, Washington DC, (2016, April 28):

Invited panel member, UAE Security Forum 2016 entitled, Bridging the Cybersecurity Talent Gap, Abu Dhabi, UAE (2016, February 21).

Invited panel member at the Electronics/Cyber Security at the Symposium on Commercializing Innovation: Attracting Investors and Entrepreneurs, Federal Laboratory Consortium, Arlington, VA, (2011, September 21).

Invited member to the Cyber Security Information Exchange at CIA's Headquarters facility in McLean, VA, (2011, June 29-20).

Attendee at the invitation-only Conference of CIOs, HIM Directors, and HIM/IT Educators of Northern Virginia, and participated in the working group to define certification requirements for the new HIM/HIT fields, (2010, May 14).

Attendee at the invitation-only International Academy of Business Conference in Las Vegas, NV., Participated in the collegiate discussions and presented a paper entitled Innovative Approaches to a Multidisciplinary Program: Developing a Comprehensive Undergraduate Health Information Management Program, (2010, May 9 -12).

## *University Service*

### *Leadership*

School Director and Member University Faculty Leadership (2020 - date)  
Member of the College of Business, Innovation, Leadership, and Technology (BILT) Leadership Team (2020 to present)  
Member University Strategic Committee on Research (2020 to date)  
Chair, Institutional Review Board (IRB) (2021-2024)  
Member of the school's Deans, Chairs, and Directors (DCD) group, the main management team for the School of Business and Technology (2015 to 2020)  
President, Faculty Council (2012 – 2014)  
Secretary, Faculty Council (2010-2012)  
Member, Faculty Leadership Committee (2012 – 2015, 2017 – 2019, 2019-2021)  
Acting Associate Dean (2010)

### *University Committee Membership*

Member and School Representative, Academic Policy, Budget, and Planning Committee (2016 to 2021)  
Member and School Representative, Rank and Tenure Committee (2015 – 2017)  
Senior Advisor, Quality Matters Taskforce (2013 – 2016)  
Member and School Representative, Institutional Review Board (IRB) (2014 – 2016)  
Chair, Member, and School Representative, Undergraduate Academic Standards Committee (2004 to 2009)  
Member and School Representative, Undergraduate Curriculum and Instruction Committee (2009 to 2010)  
Member and School Representative, Liberal Arts Core Presidential Committee (2008 to 2009)

### *Other*

Regular faculty panelist on the university's Academic Hearing Panels (2016 – present)

### *External University Representation*

Member of the Talent Ready Leadership Committee, CoLAB, Greater Washington Partnership, focusing on developing K-12 programs for cybersecurity and computer science.

Liason with Dc public schools to prepare a technology-focused articulation agreement.

Member of the Planning Committee, 3<sup>rd</sup>, 4<sup>th</sup> and 5<sup>th</sup> Annual Virginia Cybersecurity Education Conference, July 2020 to July 2022

University Representative for the National Cyberwatch Center, an organization fostering educational pathways in cybersecurity

Worked extensively with George Mason University on the development of the Commonwealth Cyber Initiative (CCI) Northern Virginia Node, approved in July 2019. Member of the three working groups including research, innovation, and workforce.

One of three university representatives on the Virginia Foundation of Independent Colleges (VFIC) STEM taskforce, leading the subgroup on community outreach (2018 to date).

Member of the Northern Virginia Regional Commission (NVRC), Military/Community group, attending their meetings every 2 months, and participating in the task forces on cybersecurity workforce and autonomous vehicles (2017-date).

Committee Chair (2011-2014) and member (2008-2011 and 2014-present) for the advisory committee that advises the Arlington County Public School system on career and technical education programs in the county.

University Representative, STEM Connector Higher Education Committee (2015 to date)  
Volunteer Coordinator and Instructor for classes at the Falls Church Senior Center, focusing on using mobile apps to keep the brain active and using the Internet effectively and safely (2014 to date).

Judge for the Diocese of Arlington Science Fair for middle school students (2018 and 2019)

Member of the National Cryptologic Museum Foundation (2021-present)

### *Memberships*

ACM  
IEEE  
ISACA



Council for Adult and Experiential Learning (CAEL)