TERRY (AKA TERRI) R. MERZ DCS, CISSP, CISM

Dr. Merz is a Senior Research Scientist at the Pacific Northwest National Laboratory (PNNL). In February of 2022 she was granted a Joint Appointment as a Cyber Research Fellow at the College of Emergency Preparedness, Homeland Security and Cybersecurity (CEHC) at the University at Albany. She holds a Doctorate and Masters in Computer Science, with a concentration in Information Assurance from Colorado Technical University, and a Bachelor of Science in Information Management from the University of Maryland.

Dr. Merz has 25+ years of cybersecurity experience. This experience spans across the areas of systems and cybersecurity engineering, testing (Blue/Red Team tesssting), and management. In her roles as a Fully Qualified Navy Validator, and an Information Systems Security Engineer on behalf of the National Security Agency, Dr. Merz focused on vulnerability testing, and the design of mitigations for enterprise architectures. In addition to security engineering and vulnerability testing, Dr. Merz spent several years in the area of cyber incident response. These activities included incident response to Advanced Persistent Threats (APT) on industrial control systems for the Navy. From 2014 onward, her specific area of research focused on asymmetric cyber operations and analytics. These studies included rapid prototyping studies resulting in the development of cyber resilient tactics, techniques and procedures, as well as first responder detection techniques. For 2 years, Dr. Merz conducted research in the area of software-enabled devices (System of Systems), Zero Day vulnerabilities relative to software-enabled devices, and the development of resiliency tactics, techniques and procedures for software-enabled devices. While conducting applied research on APT's and specifically Zero-Day attacks, Dr. Merz included Behavioral INFOSEC into her research areas. With humans forming the primary attack vector of advanced cyber threats, Dr. Merz found this area of research to be a natural fit for her ongoing studies. Prior to joining PNNL, Dr. Merz held positions in and in support of the Federal government to include Chief Information Security Office, principal cybersecurity engineer, fully qualified validator, cybersecurity assessor and incident responder for a variety of sponsors to include the IC, Federal and State Law Enforcement, and the Department of Defense. Between 2002 and 2014, Dr. Merz was a co-owner of an award-winning small business that provided cybersecurity services to a wide variety of Federal, State, and local governments as well as commercial clients.