



Research Seminar

Towards a Zero Trust Architecture in a Cloud-based Ecosystem Dr. Michaela Lorga **NIST**

Date: Nov 19th, 2021 Time: 14:00-15:00 Teams Link: Join Seminar (We'd appreciate if you could optionally <u>register</u> to join our mailing list)

Abstract:

When coupling the continuously growing and changing landscape of advance persistent threats with the explosion of "pervasive computing" or "ambient intelligence" founded by the hyper-connectivity of "everything", we reach a technical inflection point which calls for cloud solutions that meet the zero-trust architecture's (ZTA's) requirements. This talk will discuss core aspects of such solutions and demonstrate the elevated risk of using available capabilities incorrectly.

Biography:

Dr. Michaela lorga serves as senior security technical lead at the National Institute of Standards and Technology (NIST), Computer Security Division. She also co-leads the Open Security Controls Assessment Language (OSCAL) project and chairs the NIST Cloud Computing Public Security and Forensics Working Groups. Having previously served in a wide range of consulting positions in both, government and private sector industries, Dr. lorga has a deep understanding of cybersecurity, risk assessment and information assurance for cloud and fog computing and IoT systems. In her role at NIST, Dr. lorga supports the development and dissemination of cybersecurity standards and guidelines that meet national priorities and promote American innovation and industrial competitiveness. Aligned with NIST's mission, Dr. lorga's work particularly focuses on collaborating with industry, academia, and other government stakeholders on developing a high-level, vendorneutral security and forensics guidance. Dr. lorga received her Ph.D. from Duke University in North Carolina, USA.

Mr. Joseph Allen is an Enterprise Cloud Architect with over 25 years of experience in technology across multiple platforms with multiple vendors. He provides enterprise level services to the Federal Government, Department of Defense, commercial entities as well as non-profit organizations. Mr. Allen counsels stakeholders, as well as mentoring engineering delivery teams with current relevant delivery techniques. Mr. Allen holds 11 Salesforce Certifications including Certified System Architect and Certified Application Architect. Mr. Allen received his Master of Science in Management Information Systems from George Washington University.

Chris Hughes currently serves as the Co-Founder and CISO of Aquia. Chris has nearly 20 years of IT/Cybersecurity experience. This ranges from active-duty time with the U.S. Air Force, a Civil Servant with the U.S. Navy and General Services Administration (GSA)/FedRAMP as well as time as a consultant in the private sector. In addition, he also is an Adjunct Professor for M.S. Cybersecurity programs at Capitol Technology University and University of Maryland Global Campus. Chris also participates in industry Working Groups such as the Cloud Security Alliances Incident Response Working Group and serves as the Membership Chair for Cloud Security Alliance D.C. Chris also co-hosts the Resilient Cyber Podcast. Chris holds various industry certifications such as the CISSP/CCSP from ISC2 as holding both the AWS and Azure security certifications. He regularly consults with IT and Cybersecurity leaders from various industries to assist their organizations with their cloud migration journeys while keeping security a core component of that transformation. **Please contact Jennifer for any Teams connectivity issues: j.mcculloch@lancaster.ac.uk**