Presentation Title: Data Analytics Overview and Use Cases Tutorial

Topic / key words:

Data Analytics / big data, data analysis, data fusion, data storage, data sources, infrastructure and technology, screening and filtering algorithms, machine learning, and complexity

Abstract:
This tutorial provides an in depth review of the ever evolving technical area called "Data Analytics," a subset of "Big Data," that encompasses data analysis, data fusion, data storage, data sources, infrastructure and technology, screening and filtering algorithms, machine learning, and complexity. These techniques will be introduced with respect to their individual contribution to data analytics and to their combined contributions to data analytics systems. Specific use cases will be presented in which participants will observe, both through presentation and videos, the individual and combined applications and value of these techniques and systems for specific commercial and Department of Defense (DoD) use cases. Participants will emerge from this tutorial with a focused understanding of data analytics principles and techniques that will enable them to apply these concepts toward building engineering systems for mission decision support.

Target audience:
This tutorial is applicable to individuals interested in the analysis of data, especially data scientists. Individuals who work in operations centers that are responsible for the processing, exploitation and dissemination of large amounts of data collected from a wide variety of sensors will also find this tutorial very useful. Systems engineers focused on analysis of complex systems, mission support, and automated decision aides are also included in the target audience.

Learning outcomes:
Participants will emerge from this tutorial with a focused understanding of data analytics principles and techniques that will enable them to apply these concepts toward building engineering systems for mission decision support.

Geographical preferences/constraints (Please note countries/regions where you would be willing to travel)
USA
Canada
Europe (UK, Norway, Germany, Austria, Switzerland, Sweden, Norway)