Engaging with DARPA

DARPA's mission is to make pivotal investments in breakthrough technologies for national security, thus catalyzing the development of capabilities that give the Nation new options for preventing and creating strategic surprise.

The Defense Sciences Office (DSO) is one of six technical offices at the agency. DSO identifies and pursues high-risk, high-payoff fundamental research initiatives across a broad spectrum of science and engineering disciplines including materials science, computing and autonomy, engineering design and manufacturing, physics, chemistry, mathematics and social science.

This presentation will give an overview of DARPA, working with DARPA and the Defense Sciences Office, and description of some of the current activities DSO's program managers are working on.

ABOUT THE SPEAKER

Stefanie Tompkins
Director, Defense Science Office, DARPA

Dr. Tompkins has been the Director of DARPA's Defense Sciences Office since April 2014, where she leads and manages DARPA's most exploratory office in identifying and accelerating breakthrough technologies to prevent and create strategic surprise. She has held several roles at DARPA, including Program Manager, Deputy Director of DARPA's Strategic Technology Office, and the DARPA Chief of Staff.

Before joining DARPA, Dr. Tompkins spent 10 years at Science Applications International Corporation. While there, Dr. Tompkins led and managed a successful profit-and-loss unit focused on electro-optic and RF sensor development and data analysis. Prior to SAIC, she served as a military intelligence officer in the U.S. Army.

She has made a number of technical contributions throughout her career to the fields of imaging spectroscopy, geology, navigation, and optical element manufacturing. For instance, she initiated and led a DARPA program that demonstrated the use of global lightning signals as navigation beacons, as well as developing new filtering techniques to allow on-the-fly incorporation of diverse sources of location data. As a NASA-funded scientist, she developed new methods for extracting mineralogical information from reflectance spectra. Dr. Tompkins has also developed and patented new spatial and spectral data processing techniques for applications such as change detection, plant species discrimination, and feature extraction from imaging spectroscopy data.

She received her Ph.D. and M.Sc. in Geological Science from Brown University, and her B.A. in Geological and Geophysical Sciences from Princeton.

Wednesday, October 19, 2016
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1:15 - 1:30 pm Reception
1:30 - 2:30 pm Seminar
2:30 - 3:15 pm Poster Session

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