



| TOPIC | (Enter Topic here) |
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| ORGANIZERS | Student Leadership Council and Faculty of ACIT Institute and TECHLAV Center |
| AREA | Human-Machine Teaming & AI |
| SPEAKER | Dr Neta Ezer, Senior Manager of Strategic Planning Northrop Grumman, Corporate |
| DATE | Friday October 25, 2019 |
| TIME | 3:00 – 4:00 P.M. (EST) |
| VENUE | McNair LR4, North Carolina A&T State University, UTSA and SIPI will be joining through video-conferencing |
| FEES | No Charge |

SYNOPSIS

The field of Human-Machine Teaming (HMT) seeks to integrate humans and artificial intelligence (AI) in ways that lead to significant mission performance improvements over that which humans or machines can achieve alone. Highly autonomous future urban air mobility (UAM) systems shift, rather than eliminate, roles for humans – from human-within-the-loop to human-on or human-over the loop operations. Challenges for designing effective HMT for UAM are numerous. One challenge is how to infer human intent and autonomously translate it into plans and actions for unmanned vehicles. Another is how to build calibrated levels of trust in UAM systems, while maintaining situation awareness and appropriate workload when supervising a hundred or more vehicles.

This talk will present the challenges and opportunities for HMT across civilian and military operations. Specific examples will include identifying anomalous vessel behaviors in a maritime environment, supervisory control of swarms of unmanned vehicles and adaptive human-AI interactions based on wearable sensors. The talk will also include a model of Trust Engineering in HMT.

ABOUT THE SPEAKER



Neta Ezer, Ph.D.

Neta Ezer is the Northrop Grumman Corporate Senior Manager of Strategic Planning. Dr. Ezer previously served as Technical Fellow and Architect for Human-Machine Teaming in Northrop Grumman Mission Systems and as an Artificial Intelligence (AI) Architect for the Northrop Grumman AI Campaign.

Prior to Northrop Grumman, Dr. Ezer was a Senior Human Engineering Researcher at the Futron Corporation, working on NASA Orion, International Space Station and human-robot interaction research. She served as Assistant Professor of Industrial Design at the Georgia Institute of Technology. Dr. Ezer has over 15 years of experience in human factors, user experience and AI, with over 40 published papers and proceedings in these areas. Dr. Ezer holds a B.S. in Industrial Design and M.S. and PhD degrees in Engineering Psychology from the Georgia Institute of Technology.

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