



Pursuit of Awareness in Space Domain Awareness



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2164 Martin Hall, DeWALT Seminar Room

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ABSTRACT

With multiple active nations and a nearly \$400B annual economic value, the space domain is increasing congested, contested, and competitive. Space Domain Awareness is necessary to ensure on-orbit safety, continued access to space, and enforce norms of behavior. Space Domain Awareness includes the perception of on-orbit elements within a volume of time and space, the comprehension of their meaning, and the projection of their status in the near future. This talk begins by describing recent work in detecting, tracking, and characterizing space objects. Finally, it will conclude with a discussion of new hypothesis centric decision support methods in sensor tasking that resolve hypotheses quickly while mitigating confirmation bias.

BIO

Prof. Holzinger is an Associate Professor and H. Joseph Smead Faculty Fellow in the Smead Aerospace Engineering Sciences Department at the University of Colorado Boulder. His research focuses on theoretical and empirical aspects of space domain awareness, in which he has authored or co-authored nearly 100 conference and journal and papers. He is a recipient of an AFOSR Young Investigator Award and the National Academies Grainger Award, and is a National Academies selectee for the US Frontiers of Engineering Symposium. Dr. Holzinger is an AIAA Associate Fellow and an Associate Editor for IEEE Transactions in Aerospace and Electronic Systems. Dr. Holzinger holds a PhD from the University of Colorado Boulder, and M.S. & B.S. degrees from the University of Washington.

