



UAS at UTK: Drones for Research

SAL Brown Bag Lunch
Seminar Series

"Drones for Civil Engineering"

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**Civil and Environmental Engineering
University of Tennessee, Knoxville**

12:15 p.m., Friday, February 1, 2019

**NIMBioS, Hallam Auditorium (Room 206)
Claxton Education Building**

The horizontal nature of civil engineering leads to some practical and creative applications of drones in the industry. Nearly all the life cycle stages of a construction project can benefit from deploying drones in the field. In this presentation, we discuss two applications of drones in civil engineering. In the first application, the geo-referenced image acquired by a drone is aligned with virtual image generated from a three-dimensional building information model to expedite the facility inspection process. In the second application, ground penetrating radar is integrated with drones to survey a concrete bridge deck to detect, locate, and characterize structural defects. The challenges of using drones in these applications will also be discussed.

For more information, visit www.nimbios.org/SAL/uas-seminars