

## **INTEGRATING THE UAS IN UNDERGRADUATE REMOTE SENSING TEACHING AND RESEARCH AT THE UNIVERSITY OF NORTH GEORGIA**

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### **ABSTRACT:**

The University of North Georgia (UNG) has begun to evaluate both fixed and rotary UAS platforms across the departments to evaluate their potential for furthering both student learning experiences and undergraduate research. A research project of the Institute for Spatial Analysis (IESA) at UNG has acquired the fixed wing eBee Sensefly UAS and is currently piloting its integration into the undergraduate geospatial science curriculum. Limited very low altitude, line of sight calibration runs within areas of our campus have help us understand the capabilities that this technology brings to learning and research opportunities at UNG. In our pilot area of study on the UNG, we will collect overlapping imagery and generate 3-D models. These models will be compared with models based on LiDAR data. Geographic Object Based Image Analysis (GEOBIA) methods are essential to the analysis of voluminous high resolution UAS data and the associated computational, regulatory and curricular issues will be discussed. Several future interdisciplinary projects are envisaged with the eBee UAS will also be presented.