Remote Sensing in Higher Education: The Impetus for Revisiting Content and Pedagogy
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Remote Sensing is a relatively recent academic discipline that is rapidly changing with technology. The increasing
deployment of sensors on aerial and space based platforms is heralding a data deluge which presents both an
economic opportunity and a workforce development challenge. The confluence of rapid computing, data storage,
novel techniques and increasing data availability is an opportunity for higher education to reshape introductory
and intermediate remote sensing courses offered at colleges and universities. This curricular re-engineering is
needed to give students relevant skills for remote sensing in the 21st century. In addition, advances in the
cognitive sciences have informed the integration of active learning pedagogies into college physics and chemistry
courses. These novel pedagogies involve students in active learning activities that connect theory with their
experiential domain. This talk will discuss the need for a modern remote sensing curricula that effectively
integrates novel content, technology and active-learning pedagogy to incur lifelong learning in GIScience
students. Some efforts to address the issues stated above also will be discussed.