

Efficient multitemporal change detection techniques for hyperspectral images on GPU

Título Efficient multitemporal change detection techniques for hyperspectral images on GPU

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Abstract Hyperspectral images contain hundreds of reflectance values for each pixel. Detecting regions of change in multiple hyperspectral images of the same scene taken at different times is of widespread interest for a large number of applications. For remote sensing, in particular, a very common application is land-cover analysis. The high dimensionality of the hyperspectral images makes the development of computationally efficient processing schemes critical. This thesis focuses on the development of change detection approaches at object level, based on supervised direct multivariate classification, for hyperspectral datasets. The proposed approaches improve the accuracy of current state of the art algorithms and their projection onto Graphics Processing Units (GPUs) allows their execution in real-time scenarios.

LIGAZÓNS

 Teseo

DESCARGAS

 Referencia BibTex

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PROXECTOS DE INVESTIGACIÓN

SHSCAP: Solucións hardware e software para a computación de altas prestacións

PROGRAMAS CIENTÍFICOS

Computación avanzada

Visión artificial (antigo)