## A REVIEW ON IMAGE SEGMENTATION TECHNIQUES WITH REMOTE SENSING PERSPECTIVE

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## **ABSTRACT:**

With the growing research on image segmentation, it has become important to categorise the research outcomes and provide readers with an overview of the existing segmentation techniques in each category. In this paper, different image segmentation techniques applied on optical remote sensing images are reviewed. The selection of papers include sources from image processing journals, conferences, books, dissertations and thesis out of more than 3000 journals, books and online research databases available at UNB. The conceptual details of the techniques are explained and mathematical details are avoided for simplicity. Both broad and detailed categorisations of reviewed segmentation techniques are provided. The state of art research on each category is provided with emphasis on developed technologies and image properties used by them. The categories defined are not always mutually independent. Hence, their interrelationships are also stated. Finally, conclusions are drawn summarizing commonly used techniques and their complexities in application.