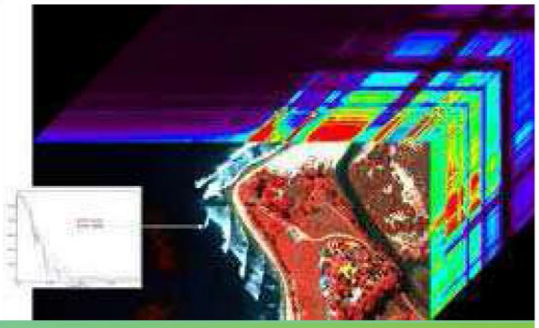
HSI 2016

In collaboration with the Hyperspectral Imaging Centre

University of Strathclyde Glasgow



PROGRAMME
Hyperspectral Imaging & Applications

Date: Wednesday 12th & Thursday 13th October 2016
Venue: Ricoh Arena Coventry, UK

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INTRODUCTION OF SEPARATION BOUNDARY IN SUB-PIXEL MAPPING BASED ON ATTRACTION MODEL

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ABSTRACT

In this paper, a new sub-pixel mapping method is proposed. This method uses sub-pixel spatial attraction model in order to separate existing endmembers in the mixed pixels. Each endmember is attracted by similar endmember in neighboring pixels and repulsed by the others. After that, a specific shape for each endmember is considered. This shape depends on the number of endmembers and their abundance fractions in the mixed pixels. This method is compared with sub-pixel spatial attraction model (SPSAM) and efficiency of our algorithm is shown by calculating the classification accuracy. Proposed algorithm could be significantly increased the classification accuracy.

Index Terms— sub-pixel, hard classification, attraction,mixed pixels