

# Scalable LiDAR-assisted Multiple Endmember Spectral Mixture Analysis

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**Abstract**—As remote sensing takes momentum for monitoring ecological data, we have to deal with loads of high precision, high dimensional data, the processing of which is beyond any conventional computer. In this paper we introduce a scalable architecture for computing Multiple Endmember Spectral Mixture Analysis facilitating LiDAR canopy height information. We propose to use SciDB for storing hyperspectral and LiDAR data as a parallel array data-store, and the computation engine will be performed by in-memory map-reduce using Spark. This architecture enables the use of multiple conventional computation engines and allows us to process data on-demand.

**Keywords**—component; formatting; style; styling;

## I. INTRODUCTION

This demo file is intended to serve as a “starter file” for IEEE conference papers produced under  $\text{\LaTeX}$  using IEEEtran.cls version 1.7 and later.

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## III. CONCLUSION

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## ACKNOWLEDGMENT

The authors would like to thank... more thanks here

## REFERENCES

- [1] H. Kopka and P. W. Daly, *A Guide to  $\text{\LaTeX}$* , 3rd ed. Harlow, England: Addison-Wesley, 1999.