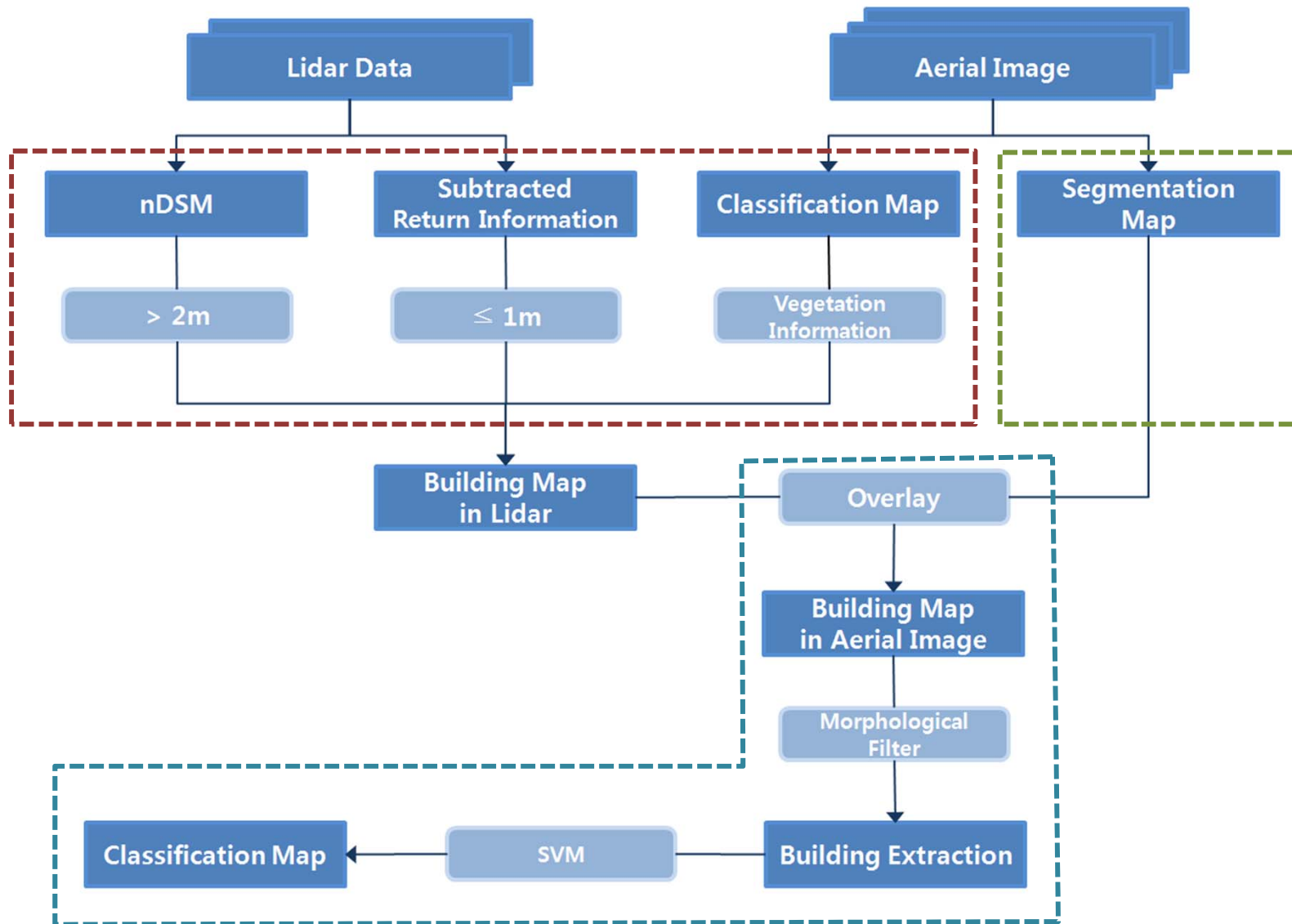


“Object-based classification of an urban area
through a combination of aerial image and airborne
LiDAR data”

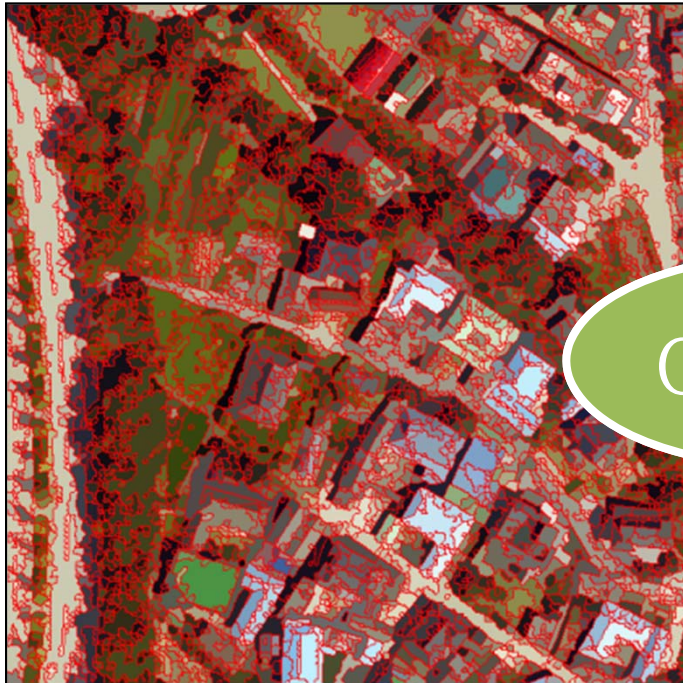
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- ◆ The urban landscape consists of a variety of man-made objects such as buildings, streets, roadways, and parking lots, and natural features like grasses, trees, and ponds.
- ◆ No single type of data, such as a satellite image, can provide a reliable solution to a complicated mapping task.
- ◆ The objective of this work is to increase the accuracy of classification by combining aerial image and LiDAR data in the sub-urban area.



< Segmented Aerial Image >



< Building Extraction Data >



Overlay

“If the area of building pixels forms **more than 50 percents of one segment**, the segment is classified to a building object in aerial image”

< Building extracted in Aerial Image >



< Final result of building objects >



Closing

Filtering

< Aerial Image >



SVM

< Classification result >



 Building  Road  Forest  Grass  Bare soil

- ◆ This paper proposed a method that classify the sub-urban area having spectrally similar materials by combining LiDAR data and an aerial image.
- ◆ Our study will focus on the extraction of accurate DEM and proper selection of segmentation algorithm.