

# Augmented Reality and Remote Sensing: Using Multi-Spectrum to Exhibit Our Physical Environment

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**Key words:** Education; Geoinformation/GI; Laser scanning; Photogrammetry; Remote sensing; Augmented Reality

## SUMMARY

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**Abstract:** In this paper, we propose an AR technology in which our surroundings can be visually enhanced by superposing common video with information from multispectral bands such as red and infrared channels. The camera used in this study is a NIR camera with a spectral range of 600nm-975nm, which is commonly used for vegetation study. We utilize images acquired from the red and infrared channels to calculate the information about e.g. the vegetation NDVI and a customized object class and put them into a library. An Android smartphone based video camera is used to record the real environment, in the predominant scene, augmented information from the library can be retrieved and superposed on it.

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FIG Working Week 2017

Surveying the world of tomorrow - From digitalisation to augmented reality  
Helsinki, Finland, May 29–June 2, 2017