THEORETICAL FRAMEWORKS OF REMOTE SENSING SYSTEMS BASED ON COMPRESSIVE SENSING

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ABSTRACT:

As an application of Compressive Sensing (CS) in remote sensing area, the theoretical frameworks of SAR and optical imaging system based on CS are investigated. The processes of data acquisition are mathematically described. After that the sparse representation of images corresponding to the two systems are also presented. Finally, the spare recovery is employed to retrieve images. Numerical simulations validated the feasibility of such imaging systems.

TOPIC: Image processing and pattern recognition
ALTERNATIVE TOPIC: Image processing and pattern recognition