(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :22/02/2024

(21) Application No.202441012839 A
(43) Publication Date : 08/03/2024

(54) Title of the invention : SYSTEM AND METHOD FOR HYPER SPECTRAL IMAGE FEATURE EXTRACTION AND CLASSIFICATION USING A TWO-STAGE HYBRID MODEL

(51) International classification	:G06N0003040000, G06N0003080000, A61B0005000000, G06K0009620000, G01J0003020000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

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(57) Abstract :
ABSTRACT: Title: System and Method for Hyper Spectral Image Feature Extraction and Classification Using a Two-Stage Hybrid Model The present disclosure proposes a system (100) and method for classifying and extracting spectral-spatial features of the hyper spectral image using a two-stage hybrid model. The system (100) comprises plurality of modules (108). The plurality of modules (108) comprises an input module (110), an analyzing module (112), an extraction module (114), a classification module (116) and a communication module (118). The input module (110) is configured to extract and store one or more hyper spectral image (HSI) patches. The analyzing module (112) is configured to analyze the one or more HSI patches, thereby generating spectral signatures. The extraction module (114) is configured to extract spectral-spatial features using discrete wavelet two-dimensional convolutional neural network (CNN). The classification module (116) is configured to classify the at least one HSI patch using a wavelet neural network (WNN).

No. of Pages : 37 No. of Claims : 10