Accurate and Interpretable Classification of Microspectroscopy Pixels Using Artificial Neural Networks

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Highlights

- The problem of accurate and interpretable labeling of spectral images is addressed.
- A tandem of Artificial Neural Network (ANN) models is designed to achieve accuracy.
- Labelling rules are generated from the tandem to deliver an interpretable model
- The labeling method was evaluated on labeled pixels and reference rules.
- The labeling accuracy was determined to be 85% (pixels) and 96% (rules).