

Training Data Processing

Collect Interferogram Images

Extract Interferogram Arrays from ROI

Compute Spectra from Interferograms

Compute Area Under Curve for Each Fluorescent Band

Normalize the Interferograms and Labels

Test Data Processing

Collect Raw Interferograms

Normalize

Image Synthesis

Synthesize a Spectrum for Each Pixel

Convert Spectra to RGB

Adjust Brightness

Complete

Training Data

Predictions

Training

Labels

Optimize Weights

Get Predictions

Loss Function

Loss Score