perClass BV

Spectral Image Interpretation

Online training with perClass Mira

Make sense of your spectral images

Goal

To empower participants to interpret spectral images without programming.

Focus

The course focuses on interpretation of spectral images in practical use-cases. Participants learn how to sort objects by material, identify unknown foreign bodies, estimate product quality, quantify sugar content in fruit, estimate moisture content, define custom spectral indexes.

Participants are welcome to also use their own data, and benefit from receiving feedback on their own challenges.

Course characteristics

- Focus on interpretation of spectral images
- Hands-on practice on industrial and applied research use-cases
- Receive feedback on your challenge by using your own spectral data
- Additional private one-on-one session focused on your specific needs

For whom

- System integrators
- Applied researchers in phenotyping, food quality, recycling...
- Distributors and resellers of spectral imaging systems

Prerequisite

None: No programming or machine learning know-how is required. perClass Mira software and examples of spectral imaging use-cases are provided by the organizers.

Software used

perClass Mira license is provided for two weeks.

Requirements

To enable the hands-on nature of the course, participants need their PC with Windows 64 bit. NVIDIA GPU card is beneficial, but not required.

Fees

695 EUR introductory price. 25% discount for additional participants from the same institution in the same course.

Location

On-line, four modules (2-hour/module) plus an additional one-on-one module (1 hour).

Registration

You can register at www.perclass.com

Course content

	Content	Case-study
Module 1	Basics of spectral imaging Classification use-case Active learning to improve labeling Classification performance and fine-tuning	Classification of natural objects Segmentation of stems and leaves
Module 2	Object segmentation and classification Foreign object detection with unknown objects Per-object performance estimation	Natural objects classification Identify French fries with defects Foreign object detection (plastic in food)
Module 3	Regression use-case Quantification in spectral imaging Data cleaning	Quantification of salt in a compound Moisture estimation in biscuits Dry matter content in leaves
Module 4	Visualization of spectral indexes Export of data and models Model deployment basics	Plant phenotyping Seed size distribution Live data acquisition
Custom session	One-on-one Q&A	Feedback on participant's data