Visual Inspection for Quality Control and Traceability

Cutting-edge image analysis technologies converge with industrial needs, shaping the future of quality assurance and product traceability

Workshop topic
In this workshop, we discover how industrial image processing becomes the cornerstone for ensuring impeccable quality and seamless traceability using image-based inspection, recognition, documentation, and robot guidance. From defect detection to part recognition to dimensional accuracy, explore how vision systems contribute to elevating product standards. Witness real-world applications where automated inspection not only guarantees product excellence but also enhances production efficiency.
The workshop aims to offer insights into the utilization, prevailing challenges, and outlook of image analysis technology in these domains. Additionally, the conference provides a valuable platform for networking with key stakeholders from both industry and research, fostering the establishment of new connections.

Date / Location

Date:	9. Sept. 2024
Duration:	10.15 a.m. – 6 p.m.
Location:	Fachhochschule Graubünden, Pulvermühlestrasse 57, 7000 Chur

Target audience
This workshop will be a forum for participants from industry and research to share their experiences and discuss challenges and perspectives of current and future applications.

Cost
This workshop is free of charge

Registration compulsory
Registration link, Registration Deadline: 26. Aug. 2024

Language
English preferred

Organized by the University of Applied Sciences Graubünden, Swissphotonics and the Innovation Booster Photonics

Time	Presentation & Topic
10:15 h	**Registration, Welcome Coffee**
10:45 h	**Welcome to the University of Applied Sciences of the Grisons** Jürg Kessler, FH Graubünden
11:00 h	**Introduction to the Workshop** Christoph S. Harder, Swissphotonics and Selina Casutt, Innovation Booster Photonics
11:10 h	**Visual Inspection for Quality Control and Traceability, Organizational remarks, Lab tour** Udo Birk, FH Graubünden
11:30 h	**Lab Tour FHGR**
12:30 h	**Lunch, 1 h**
13:30 h	**Smart Food Production Machinery - The Impact of Optical Systems** Manuel Höhener, Bühler AG
13:45 h	**The Digital Quality Manager – Balancing Cutting-edge AI and Hardware** Patrick Albrecht & Thomas Kleiven, Fruitful AI
14:00 h	**Augmentation and Synthetic Data for Industrial Machine Vision** Francesco Crivelli, CSEM SA
14:15 h	**High Precision Automatic Optical 3D Inspection System for Electronic Boards** Daniele Allegri & Roberto Gardenghi, SUPSI
14:30 h	**Panel Discussion / Q&A Session 1** with Manuel Höhener, Patrick Albrecht & Thomas Kleiven, Francesco Crivelli, Daniele Allegri & Roberto Gardenghi
14:50 h	**Coffee Break, 30 min**
15:20 h	**Importance of Traceability in Life Science Applications** Boris Pantic, Hamilton Bonaduz AG
15:35 h	**Product Serialization: A Key to Ensuring Product Quality and Traceability** Michael Czerny, QualiVision AG
15:50 h	**Enhancing Accuracy and Reliability in Medical Imaging Through Influencer Functions** Brandon Panos, FHNW
16:05 h	**3D Reconstruction with Multi-view Structured Light** Philipp Roebrock, FHGR
16:20 h	**Panel Discussion / Q&A Session 2** with Boris Pantic, Michael Czerny, Brandon Panos, Philipp Roebrock
16:40 h	**Networking Innovative Forces in Photonics, PICs and Quantum** Christoph S. Harder, Swissphotonics
16:50 h	**Collaboration for Radical Innovation** Selina Casutt, Innovation Booster Photonics
17:00 h	**Networking Apéro**