

Image Sensor and Camera Technology 6-9-10 May 2016 in Boston

Aphesa organizes an image sensor and camera technology training tour between October 2015 and November 2016. The training sessions are organized as three days per location and split over several courses, it is possible to subscribe for a single course, multiple courses or the full session.

The courses are introductory to mid-level, with some advanced topics, and are designed for engineers who are new to the field of imaging or non-engineering personnel who needs a more in-depth understanding of the technology or engineers familiar with some elements of machine vision but not the whole picture. It is also a good refresher course for experienced engineers and a good introductory course for sales, marketing and support personnel. Each course is accompanied by a question and answer session and an open discussion session. Some courses include exercises. There are PDF notes for each course available for download or on a pen drive.

The courses in Boston are organized at the HOLIDAY INN EXPRESS BOSTON STREET or INTELLIGENT OFFICE FINANCIAL DISTRICT between May 6th (Friday) and May 11th (Tuesday). The location depends on the number of attendees.

The course sessions or a customized course session can be organized in company for a special price and an unlimited number of attendees.

Venue

The training is organized at two possible locations depending on the number of attendees. The first possible location is the HOLIDAY INN EXPRESS, located at 69 Boston Street. The hotel has a large parking lot and is located close to a red line T station. The second possible location is INTELLIGENT OFFICE, located 265 Franklin St, suite 1702.



The training starts on the Friday after THE VISION SHOW and continues on the next Monday and Tuesday. There is no short course during the week-end.

Course schedule

- Day 1:
 - 9:00 AM to 9:20 AM : registration
 - 9:20 AM to 9:40 AM : Aphesa presentation – code : APHE
 - 9:40 AM to 12:30PM and 1:30PM to 2:15PM : Introduction to imaging (light, light spectrum, light sources, scene, behavior of light, basic radiometry and photometry, lighting techniques, polarization, filters, optical basics, MTF, camera basics, color issues, multispectral and hyperspectral imaging, camera interfaces, photography and imaging terms, lens standards, camera interface standards, camera software pipeline) – course code : IMAG, including a short break
 - 2:15PM to 5:30PM : Introduction to CMOS image sensors (photodiodes, pixels, arrays, readout circuits, ADC circuits, architectures, spatial and temporal noise sources and noise compensation, color filters, microlenses, dark current, defect pixels, ageing, temperature effects, high temperature imaging), including a short break – course code : CMOS
- Day 2:
 - 9:00AM to 9:45AM : Production of CMOS image sensors (design flow, image sensor production process, image sensor packaging, back-side illumination, wafer scale packaging) – course code : PROD
 - 9:45AM to 10:15AM : Introduction to infrared imaging – course code : IRIM
 - 10:15AM to 10:30AM : break
 - 10:30AM to 12:30PM : Introduction to software based (multiple exposure) high dynamic range imaging, including algorithms and artifacts and introduction to specific CMOS image sensors for HDR imaging, including control methods, pixel designs and artifacts – course code : HDR1
 - 1:30PM to 2:30PM : Introduction to 3D imaging – course code : 3DIM
 - 2:30PM to 4:00PM : Introduction to the EMVA1288 standard – course code : EMVA
 - 4:00PM to 4:15PM : break
 - 4:15PM to 4:45PM : Special considerations related to mobile imaging – course code : MOBI
 - 4:45PM to 5:15PM : Introduction to high speed and real time imaging – course code : HSRT
- Day 3:
 - 9:15AM to 12:30PM : Introduction to image processing, including a short coffee break – course code : PROC
 - 1:30PM to 5PM : Additional topics or private consulting sessions per specific request and appointment in the afternoon.

Prices

Course code	Price, before April 15 th	Price, after April 15 th
APHE	Free	Free
IMAG	350 euro	390 euro
CMOS	350 euro	390 euro
PROD	50 euro	70 euro
IRIM	50 euro	60 euro
HDRI	180 euro	240 euro
3DIM	75 euro	95 euro
EMVA	100 euro	130 euro
MOBI	50 euro	60 euro
HSRT	50 euro	60 euro
PROC	240 euro	300 euro

Special price for the full session : 1250 euro (ordered before April 15th) or 1500 euro (ordered after April 15th).

Reductions are offered for attendance to multiple courses (-10% on the total price for more than two course) or multiple members of a company attending the same courses (-10% for the second member, -30% for any additional member), or previous attendees (-10%).

Cancellation policy : 50 euro (or 50% of course price if less than 50 euro) if more than four weeks before the courses, 50% if less than four weeks before the courses, 100% after May 1st.

Payment terms : 30 days net, invoiced at the time of booking, net 10 after April 20th.

The full course session of three days will not run or will be reorganized over only one or two days if more than two sessions do not have the required minimum number of attendees. The minimum number of attendees in Boston is 7 and the maximum is limited to 12.

Registration

Contact info@aphesa.com or one of our authorized distributors if you intend to attend one or more training sessions, mentioning the course code and the number of attendees from the same company. Aphesa will then provide a quotation for the desired training package. The final decision to organize or cancel courses will be made two weeks before the scheduled training date. Contacting us for a quotation or for more information does not engage yourself to buy a course.

About Aphesa

Founded in 2008, Aphesa provides consulting and development services in the field of imaging. Our company has designed multiple customer specific cameras for use in industrial, medical and oil&gas applications and has provided consulting services for the design of many other image sensors, cameras and systems. Our experience includes GigE-Vision, USB, CameraLink cameras and line scan or area scan sensors in color or monochrome. Our experience also includes high temperature designs, multispectral imaging, high dynamic range imaging, high-speed imaging, embedded image processing and many other topics. Aphesa is also specialized in image sensor and camera testing and has developed EMVA1288 compliant test equipments as well as other specific test equipments for laboratory or production use; the EMVA1288 measurements are also offered as a service.

More information about Aphesa : <http://www.aphesa.com>
Contact us : info@aphesa.com

APHESA SPRL
Rue de Lorcé, 39
B-4920 HARZÉ
BELGIUM

Visit our website for distributor's contact information.

Future training sessions

Aphesa plans other training sessions in Asia, North America, Belgium and Germany in the next 12 months. Contact us for more information or visit our website, newsletter section.

