



Invitation

Dear Sir or Madam,

Industrial tracking systems are an essential component of many modern products in the areas of medicine, industrial production and measurement, virtual and augmented reality, motion capturing and gaming.

For the past 8 years, we have deployed and experienced several different tracking technologies at our multidisciplinary chair for Computer Aided Medical Procedures (CAMP) in Technische Universität München.

Within our corporate seminar on "Tracking Technologies" we offer you an exceptional opportunity to gain more knowledge about the current spectrum of cutting-edge tracking solutions and their technical specifications, applications and limitations. The seminar covers established solutions such as optical and electromagnetic tracking as well as innovative methods such as inertial sensors, RFID, fiberoptical-tracking and Kinect.

In addition to the theoretical part, our experts from industry and academia will present several systems throughout hands-on sessions for better technical understanding.

We are looking forward to your participation and an inspiring and productive exchange of knowledge and experience.

Prof. Dr. Nassir Navab

Contact, Registration & Rates

Contact Person

Prof. Dr. Nassir Navab
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Registration

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<http://campar.in.tum.de/TrackingSeminar/WebHome>



Corporate Seminar Cutting-edge Tracking Technologies Tech-Update and Training

Bundessport- und Freizeitzentrum
Faaker See, 14.05.2012



Technische Universität München



Program May 14th, 2012

Part 1: State-of-the-art and current market overview

- 8:30-8:45 **Welcome**
Prof. Dr. Nassir Navab, CAMP
- 8:45 - 9:45 **Optical tracking**
Konrad Zürl, CEO Advanced Realtime Tracking GmbH
Potential of optical tracking, limitations and solutions.
- 9:45 - 10:45 **Optical and magnetic tracking**
Manfred Schmid, CEO NDI Europe GmbH
Optical vs. electro-magnetic tracking – what is the future?
- 10:45 - 11:00 **Coffee break**
- 11:00 - 11:30 **Inertial- and ultrasonic tracking**
Ali Bigdelou, CAMP
Wide area tracking with inertial and ultrasonic sensors.
- 11:30- 11:45 **RFID large-area tracking**
Ronald Mahacek, ATOS GmbH
RFID for identification and asset management.

- 11:45 - 12:00 **RFID positioning**
Marc Böhme, amedo Smart Tracking Solutions
RFID-based tracking and navigation technology for precise positioning.
- 12:00 - 12:30 **Kinect / depth cameras**
Tobias Blum, CAMP
Kinect and other depth cameras and their applications.
- 12:30 - 13:00 **Fiberoptical tracking**
Philipp Matthies, CAMP
New fiberoptical sensor technologies allow determination of the shape and position of a fiber by measuring its curvature.
- 13:00 - 14:30 **Lunch break**

Part 2: Interactive hands-on sessions

- 14:30 - 18:00 **Practical applications**
parallel hands-on sessions
- Optical tracking, ART
ARTTRACK3 system
- Magnetic and optical tracking, NDI
NDI Polaris and Aurora
- RFID, ATOS GmbH
Simulation / demonstration
- Magic Mirror, CAMP
Augmented Reality system to visualize anatomy on your own body.
- RFID, amedo Smart Tracking Solutions
Real-time RFID locations systems

Location & Directions

The seminar takes place at the Bundessport- und Freizeitzentrum directly at the waterfront of the idyllic lake Faak in Kärnten, Austria.

Bundessport- und Freizeitzentrum
Halbinselstraße 14
9583 Faak am See
Austria

The international airport of Klagenfurt am Wörthsee is 40min away from the venue.

