INTELLIGENT TRACKING SOLUTIONS

5th WDF in Vienna, Austria
5-7 June 2019

REGISTER NOW!
#wdfvienna
This international industry event provides an ideal networking platform for more than 260 railway experts from across the globe. Expect innovative formats, inspiring keynote lectures and many opportunities for personal exchange at eye level. Share latest insights, exchange experiences and expand your network.

“Intelligent tracking solutions” is the title of the WDF 2019, which will go into its fifth round. It will again take place in Vienna from 5 to 7 June. The streams of the conference focus on innovative sensing and tracking solutions for train localisation, and asset condition monitoring.

Digitalisation opens up new possibilities for the future of mobility. Join the WDF to discuss new trends and innovations in traffic management as well as best practices in train tracking.
Schedule at a glance

**WEDNESDAY 5 JUNE**

**KEYNOTE SPEAKERS “THE FUTURE OF MOBILITY”**

- 15:00 | Registration and welcome drink
- 16:30 | Keynote speakers
- 19:00 | Dinner
- 20:00 | Get together

**THURSDAY 6 JUNE**

**TRAFFIC MANAGEMENT - CURRENT TRENDS AND PERSPECTIVES**

- 09:00 | Train Localisation
- 11:00 | Maximise efficiency - managing traffic
- 12:30 | Networking lunch
- 14:00 | Freight Transport 4.0
- 16:00 | Digitalisation, Trends and Innovations
- 19:00 | Networking dinner

**FRIDAY 7 JUNE**

**BEST PRACTICES IN TRAIN TRACKING**

- 09:00 | Track Vacancy Detection
- 11:00 | Non vital Train Tracking using DAS
- 14:00 | Official end of the 5th WDF
The Wheel Detection Forum is a real interesting and very nice meeting, where we all have the possibility to see the different point of views from the industry, from railways from Germany, France, Singapore and more. I think it is always a good thing when the railway industry is sharing, opening and connecting. […]

The Wheel Detection Forum is an ideal opportunity to connect with each other and to get updated about latest state of the art technologies. I am pleased to join this forum, thank you!
PERSONAL EXCHANGE AT EYE-LEVEL

The perfect possibility to meet with senior decision makers from all over the globe.

CHRISTIAN PUCHER
Programme and Content Director

“The Wheel Detection Forum is one of the best opportunities for sharing information about the rail industry, for networking and to keep up to date with the latest trends regarding intelligent tracking solutions for smart traffic management, innovative maintenance strategies and more.”
KEYNOTE SPEAKERS
“THE FUTURE OF MOBILITY”

16:30 TRAIN LOCALISATION

TC CHEW
Director, Global Rail Leader | Arup | UK
Future Rail 2050
- Challenges of future rail operations
- Performance in support of urban mobility

MARCO GERCKE
Director | Cybercrime Research Institute | DE
How AI will change the (rail) industry
- Current developments in AI
- Impact on Industries and Society
- Focus: Impact on Rail Industry

DIRK AHLBORN
CEO | Hyperloop Transportation Technologies | US
Building the Hyperloop
- Why we need innovation in transportation
- Innovative way to build the Hyperloop
- Current and future prospects
Evaluation of a fully train-borne localisation algorithm

- Train-borne localisation (and mapping) filter
- Practical evaluation with real GNSS and IMU data

Hanno Winter | Doctoral candidate | Technische Universität Darmstadt | DE

11:00 MAXIMISE EFFICIENCY - MANAGING TRAFFIC

Technological approaches for maximising capacity

- Digitalisation and automation provide technologies to improve railway operation
- Accurate, real-time localisation and train integrity supervision are highly important for efficient traffic management
- Real-time, reliable communication and data analysis can help to keep operation fluid

Michael Meyer zu Hörste | Chief Engineer, Department of Rail Systems | German Aerospace Center (DLR) | DE

Train localisation in command and control 4.0

- Demands of transition to new types of train detection and tracking
- Integration of GNSS-based positioning with other means
- DAS as part of train command and control 4.0

Alexey Ozerov | Head of International Department | JSC NIIAS | RU

100% availability in signaling - generating true value with Railigent

- Availability is one key driver for return from rail assets. By using data and high end analytics, Railigent helps to manage the asset performance, understands the condition and predicts upcoming failures
- Railigent as open ecosystem provides the basis for value adding operational decisions

Gerhard Kreß | Vice President Data Services | Siemens Mobility GmbH | DE
Implementing edge based cyber security for signalling networks

- Why traditional L2 VLAN approach for vital communications does not comply to OT Cybersecurity standards
- Benefits of using Layer 3 routing vs Layer 2 VLANs
- Maintaining fasts network topology recovery in a hybrid L2/L3 networking environment
- Pragmatic approach to apply Cybersecurity standards in a Layer 3 signalling network
- Real world examples of L3 signalling systems

Ray Lock | Network Technology Director | Westermo Network Technologies | SE

Potential of georeferenced railway infrastructure data

- Safe and reliable railway systems require solid track data
- High efficiency sensor measurement system runs at speeds of up to 140 km/h during normal train operations to scan your infrastructure accurately

Michael T. Weilguny | Sales Manager | SIGNON Österreich GmbH | AT

Digitalisation in railway: automated vehicle identification with RFID

- Automated vehicle identification with RFID according to EN 17230, how it’s done!
- Insights to successful process digitalisation and business applications at SBB
- Wayside intelligence, the future of wayside train monitoring systems using automated vehicle identification

Stefan Koller | Head of Wayside Train Monitoring Systems | SBB AG | CH

Security for functional safety

- Security concept for functional safety controllers
- How to encrypt safe communication

Dr. Alexander Horch | Vice President Research, Development & Product Management | HIMA Paul Hildebrandt GmbH | DE
BEST PRACTICES IN TRAIN TRACKING

09:00 TRACK VACANCY DETECTION

Axle counter business in Chinese metro market
- Growth of Chinese MT Market
- Axle Counter Product in the MT Signal System
- Axle Counter Product Development in China

Hui Zhang | Manager of Axle Counter Business Unit | CRSC Xi’an Rail Transit Industry Group Co., Ltd. | CN

Intelligent sensors for more efficient track vacancy detection
- Proven knowhow and the concept of the Internet of Things (IoT)
- Intelligent device on track through integrating the evaluation of the signal directly into the sensor

Martin Rosenberger | CTO | Frauscher Sensor Technology | AT

11:00 NON VITAL TRAIN TRACKING USING DAS

Tbc
tbc

Experience using FOS for various applications
- Train Tracking in dark territory
- Use cases of Train Tracking
- Monitoring health condition of track

Yugo Nomura | Rumo ALL | BR

FOS development acceleration through AI

Max Schubert | Head of System Architecture LST/TK/ATO | DB Netz AG | DE

14:00 END OF WDF 2019
The WDF 2019 will take place at the conference hall and foyer of the Radisson Blu Park Royal Palace Hotel. Golden metal panels cover the facade of the hotel, which is equipped with the most modern amenities and state-of-the-art technology.

Radisson Blu Park Royal Palace Hotel
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www.radissonblu.com

PARKING AREA
The public parking garage with direct access to the hotel provides a convenient and safe place to park your car.
Garage fee per day: 25 €

METRO MAP
For a detailed plan of Vienna’s metro system please visit the website of Wiener Linien: www.wienerlinien.at

TOURIST INFORMATION
For more practical information about Vienna visit:
www.wien.info

NOTE
Information on hotels and accommodation can be found online at: www.wdfvienna.com/location-travel
Registration

PARTICIPATION FEE:
390 € (incl. VAT)
Incl. documents, catering and networking events

REGISTRATION CLOSURE:
20 May 2019

EVENT LANGUAGE:
English

Networking Dinner

Schönbrunn Orangery
Schönbrunner Schloßstraße 47 | 1130 Vienna | AUSTRIA

Touchpoints

Register online and find more information: WWW.WDFVIENNA.COM

Contact us: INFO@WDFVIENNA.COM

Questions? Give us a call: +43 7711 2920-9373
What participants say about the WDF
ABOUT THE EVENT

The WDF provides an ideal platform for a wide range of railway experts from across the globe to share their latest insights and exchange their experiences.

More than 260 senior decision makers from international railway operators and system integrators, as well as manufacturers, consultants, researchers and association representatives will gather in Vienna. Together, they will again form a strong community making this event an excellent networking possibility.

The WDF is organised by Frauscher Sensortechnik GmbH
Gewerbestraße 1 | 4774 St. Marienkirchen | AUSTRIA

www.wdfvienna.com