



Cybersecurity
Standards & Certification
Machinery Automation
Analytics
Robotics
Medical
AI Process Automation

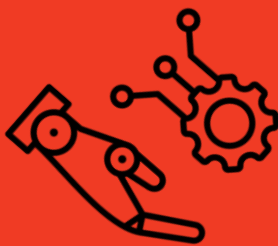
Click on Shape or scan
May 13-15, 2024



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exida PAMR Symposium 2024



Topics for this year

These and many more questions will be answered:

- How to use safety assessed semiconductors in my application?
- Which information can I expect / do I need from a safety manual?
- How is cybersecurity implemented in automation?
- How to carry out a software safety analysis (SWSA) required by IEC 61508 3rd edition?
- Elevators and SIL – what is required?
- Open source in automation?
- C++ and functional safety?

Also, we will cover:

Mechanics and functional safety – the new prEN 17955

Discussing IEC 61511

AI and functional safety in the context of IEC 61508

New machinery directive

New edition of ISO 13849-1

and more

For further information and registration please contact:



Kerstin Tietel

+49 89 44118232

kerstin.tietel@exida.com

exida PAMR Symposium 2024

Location



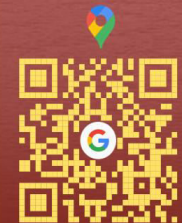
Network with world-leading experts

Listen to new approaches in Safety, Security and SOTIF

Present your brand new insights

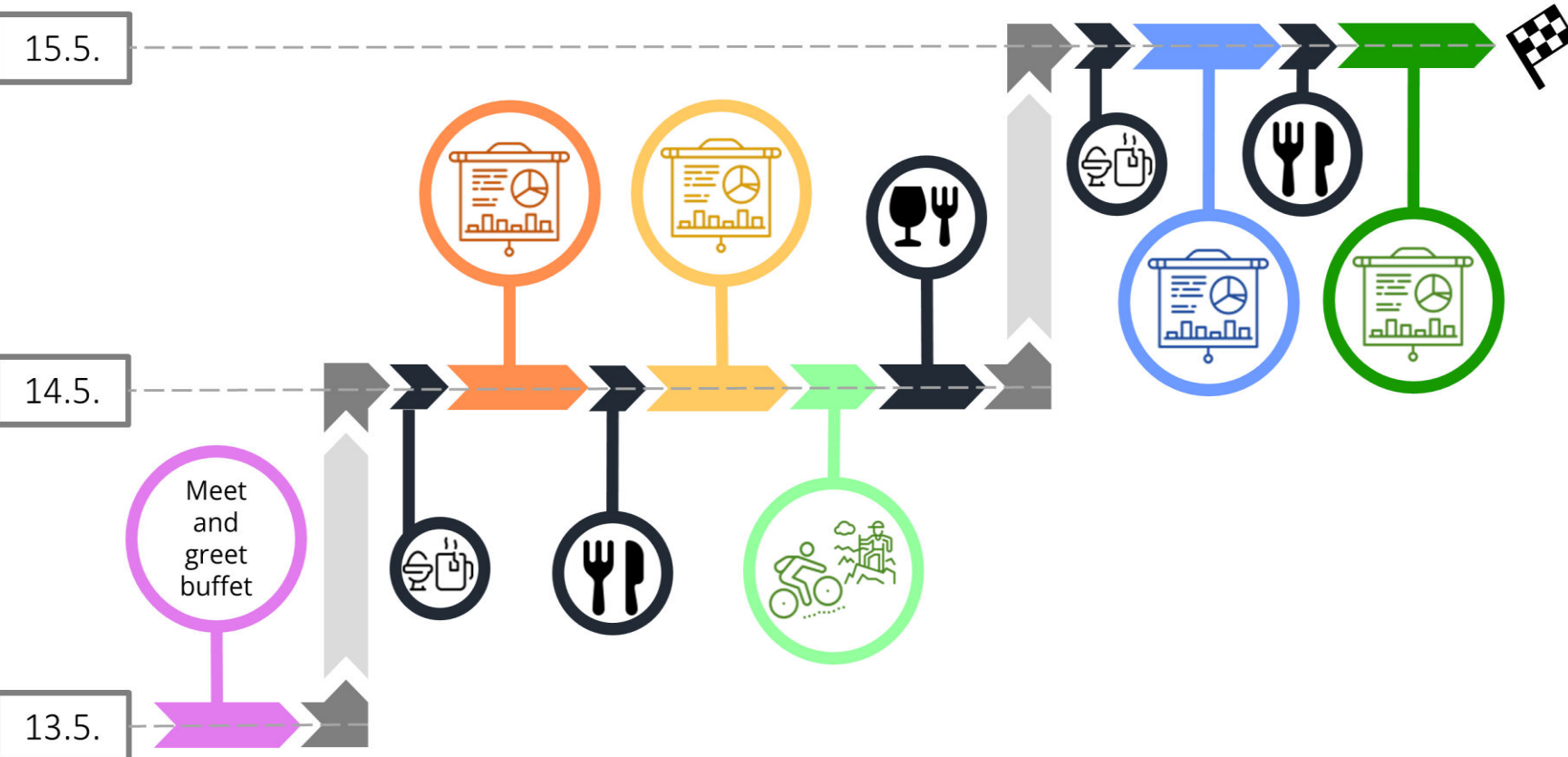
Raise questions to benefit your work

Enjoy our unique location



exida PAMR Symposium 2024

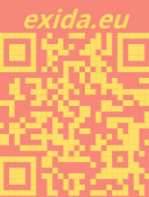
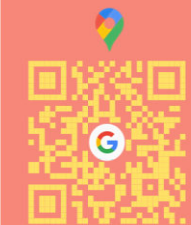
Schedule



You can expect two unforgettable days full of information, exchange, and impressions at an altitude of 1,100m (3,600ft) in an unmistakable Alpine landscape.

- First day meet and greet / champagne reception.
- two nights in a single room
- two days symposium with food and drinks*

**meals or beverages consumed outside of the planned dining will be billed separately on your own expenses.*



Topics

Developing and Assessing for Trustworthiness in AI

AI is a technological enabler and often a key factor to success and yet essential questions remain open: How can we achieve and ensure trustworthiness in AI?

The talk invites the audience on a journey starting with current AI applications, analysis based on results of current AI research and finally AI standardization and regulation. This bottom-up journey provides an insight into **failures and fault models of Deep Neural Networks**. Using the well-known safety reference lifecycle and the **risk-based** concept from IEC 61508 and ISO 31000, an approach for trustworthy AI is presented that includes hierarchical systems engineering, verification and assurance. This approach is the core of the new VDE-AR-E 2842-61 *Design and trustworthiness of autonomous/cognitive systems* as a German contribution to AI standardization. It proposes a **reference engineering model for trustworthy AI** and can be used for process audits and product assessments and is also related to the *EU AI Act*. In this way, trustworthiness including safety for AI-based systems can be achieved by utilizing the proven and known approaches for safety based on their consistent application to the new technology of AI.



Henrik Putzer
cogitron
Geschäftsführer

Contribution of AI quality measures to functional safety properties

This presentation will deal with the possibilities of evaluating verification measures for the development of AI-based safety systems. Based on the measure properties for fault avoidance and verification of IEC61508-3, the AI-specific methods are to be brought into a relation to the proof of systematic capability according to the AI-adapted V-model. This will be shown as an example for use with neural networks.



Michael Kieviet
LAPWING
Geschäftsführer

Functional Safety for Medical Devices – A Practical Guide

Manufacturers developing and testing their medical devices in accordance with the requirements of IEC 60601-1 are increasingly often being requested by Notified Bodies to provide specific evidence of functional safety. However, the term "functional safety" which is well-known in other industries, is neither defined by IEC 60601-1, nor does the standard provide tangible criteria on how to handle failures. The standard requires that medical devices are "single fault safe" but provides only little guidance on how manufacturers can achieve and demonstrate the property of single fault safety.

In collaboration, exida and the Johner Institute Schweiz GmbH have developed a practical guide. This guide not only enables manufacturers to systematically assess the safety of their medical devices and the property of being "single fault safe", but also to document the results in a comprehensible manner for both assessors and auditors by following the objectives of Functional Safety and the requirements of IEC 60601-1.



Tim Jones
exida.com GmbH
Senior Safety
Consultant



**Mario
Klessascheck**
*Johner Medical
Schweiz GmbH*
Geschäftsführer

Digitalization of functional Safety

One of the obligations of operators of plants in the process industry is to ensure that the relevant regulations for the operation of safety equipment are always complied with. Traditionally, legally compliant management of functional safety in process plants can only be achieved with enormous effort. A new, holistic approach to digitizing the security lifecycle opens new potential and helps to overcome the challenges. Data from the production units is collected and compared with the design data of the respective unit. In this way, the basis for validity of the operating license is automatically monitored. As part of the lecture, practical applications will be presented in addition to the basics.



Peter Sieber
*HIMA Paul
Hildebrandt GmbH,*
Vice President of
Strategic Marketing

Explore the groundbreaking prEN 17955, forging new pathways in mechanics and functional safety

Mechanical components are not adequately considered in the IEC 61508. This means that safety values of comparable components sometimes differ by a factor of 100 or more. The lecture presents the basic ideas of the new prEN 17955 and explains the approach how to implement functional safety of safety-related valves and actuators. It covers the different views from the manufacturer, end-user and certification body. The prEN 17955 finally brings clarity on the implementation of functional safety within mechanical components.



Marco Knödler
YNCORIS
GmbH & Co. KG
Teamleiter
MSR-Technik

Safety Functions and Associated Requirements for Flexible Robot Applications

The effective utilization of robot systems in versatile flexible application scenarios necessitates a well elaborated design of a comprehensive safety concept. Corresponding safety functions must be developed to address and mitigate potential risks associated with the operation of the robot system across various modes of operation even in adaptive and reactive handling. This presentation employs practical examples to illustrate the challenges inherent in implementing safety functions crucial for ensuring the safe and adaptable use of diverse robot systems in flexible new-style applications.



Michael Rathmair
JOANNEUM
RESEARCH
Forschungs-
gesellschaft mbH,
Forschungs-
gruppenleiter
Robotersystem-
Technologien

And many more coming...

Our Team of Experts



Meet our experts with several 100 years of cumulative experience
in Functional Safety, Cybersecurity.

Let us exchange experience and talk about the future challenges.

**We are looking forward to seeing you at our
Symposium**

Registration Form: Onsite

I register for the:
exida PAMR Symposium 2024

Date: May 13 - 15, 2024

Location: Arabella Alpenhotel am Spitzingsee
Seeweg 7
83727 Schliersee-Spitzingsee
Germany
www.arabella-alpenhotel.com

Price: € 1895. -- + tax
The price includes the accommodation.

For registration until 28th of February 2024 we will grant an early bird discount of 10% (1705. -- + tax).

Please enter the billing address:

Company: _____

Participant Name: _____

Department: _____

Street: _____

Post code, city, country: _____

Participant Email: _____

Phone number: _____

Please send the filled page via email to kerstin.tietel@exida.com.

Booking conditions: The symposium will be held in English and the presentation slides will be in English, too. In case the registered participant sends a written cancellation 50 days before the start of the symposium the cancellation will be free of charge. Until 21 days before the start of the symposium a cancellation fee of 50% of the fee will be charged. For later cancellations done by registered participants the complete training costs will be charged. A replacement of the registered participant with another person is possible at any time. The acceptance of the conditions is part of the registration. *exida.com* GmbH reserves the right to cancel the symposium short-term in a written way. In this case only the symposium fees will be refunded.

Data protection: The collected personal data is only stored and used for internal purposes related to the management of the training. This data is protected by limited access rights. The duration of the archiving depends on the legal requirements.

_____ Date

_____ Signature